

**John A. Taylor, PhD
Docent
St. Petersburg State University**

**ADAM SMITH:
RELEVANCE FOR THE
21ST CENTURY**

Троицкий мост
Санкт-Петербург
2018

УДК 330.813(07)
ББК 65.01я73
Т30

Т30 Taylor, John A., 1942—
Adam Smith: Relevance for the 21st Century. — СПб.: Троицкий мост,
2018. — 68 с.

ISBN 978-5-6040327-4-9

В издании «Adam Smith: Relevance for the 21st Century» читателям предлагается свежая интерпретация идей Адама Смита и современной неолиберальной экономической теории. Автор утверждает, что Адам Смит осуждал неконтролируемую жадность и эгоизм, считая аморальными эти качества человеческой природы, восхваляя жалость и доброжелательность, надеясь, что лишь данные качества могут стать естественными ограничителями жадности и эгоизма в человеческом обществе. Особая роль в учении Адама Смита, считает автор монографии, отводится государству, как дополнительному регулятору общества, которое должно активно вмешиваться в экономику тогда, когда ни человеческие добродетели, ни такие естественные ограничители, как «невидимая рука» рынка, не могут уберечь общество от разрушительного влияния алчности и эгоизма.

Издание тесно связано с курсом, который уже несколько лет читает автор на факультете свободных искусств и наук СПбГУ. Данный курс читается на английском языке, тогда как первое издание было переведено на русский язык в СПбГУ, что позволяет учитывать особенности терминологии российской экономической школы. Благодаря этому студенты могут успешно использовать издание в процессе обучения, чтобы глубже понимать идеи Адама Смита, чтобы лучше ориентироваться в экономической терминологии, употребляемой в зарубежной экономической литературе. Свежий взгляд на идеи Адама Смита поможет вдохновить читателей на дальнейшие исследования в области классической экономической теории, этому будет способствовать и отсылка автором к первоисточникам, которые используются в издании.

Книга Джона А. Тейлора «Adam Smith: Relevance for the 21st Century» будет полезна как студентам в процессе обучения, так и ученым-экономистам, занимающимся проблемами современной экономики.

УДК 330.813(07)
ББК 65.01я73

ADAM SMITH: RELEVANCE FOR THE 21ST CENTURY

ISBN 978-5-6040327-4-9

© ООО «ИДК Троицкий мост», 2018

TABLE OF CONTENTS

ACKNOWLEDGMENTS	6
INTRODUCTION	7
LECTURE I. GREED	10
LECTURE II. THE TWENTY-FIRST-CENTURY ECONOMIC CRISIS.....	14
LECTURE III. MORAL PHILOSOPHY	17
LECTURE IV. UTILITY.....	19
LECTURE V. EARLY UTILITARIAN PHILOSOPHY	27
LECTURE VI. LATER UTILITARIAN PHILOSOPHY.....	30
LECTURE VII. THE GERMAN UNIVERSITY MODEL.....	34
LECTURE VIII. UTILITARIAN PHILOSOPHY AND ENGLISH EDUCATION.....	37
LECTURE IX. DAVID RICARDO, THOMAS MALTHUS, KARL MARX, AND FRIEDRICH LIST	39
LECTURE X. INDICATIVE MATHEMATICS	43
LECTURE XI. THE CORN LAWS AND GREEK MATHEMATICS	46
LECTURE XII. <i>THE WEALTH OF NATIONS</i>	54
LECTURE XIII. CONCLUSION: TWENTY-FIRST-CENTURY NEOLIBERALISM	58
BIBLIOGRAPHY	61
INDEX	63

In memory of Tsujimoto Makoto (1950–2008)
and Tsujimoto Masato (1978–2011)

ACKNOWLEDGMENTS

This is a textbook. It summarizes the course ECON_218_f17 delivered in 2014 in the Department of Liberal Arts and Sciences at Saint Petersburg State University in Russia. The course was called “British Political Economy,” and it was about Adam Smith and his immediate British legacy.

Many thanks to students for taking this course. Many thanks also to faculty members in the Department of Theory and Methodology for Teaching Arts and Humanities. They generously voted to accept me as their colleague, and they approved and supported the publication of these lectures. Dr. Irina Burova made many valuable corrections and suggestions about the book and she also oversaw its translation made into the Russian language by Dr. Tatiana Shvetz so that Saint Petersburg State University Press could publish this book in translation in 2015. Richard A. S. Hall read the manuscript and made many wise suggestions. Olga Kuvakina provided expert advice in dealing with publication. C. J. Polychroniou, PhD, Research Associate and Policy Fellow of the Levy Economics Institute of Bard College, Annandale-on-Hudson, read two drafts of the manuscript and recommended it for publication. Danyil Raskov first assigned me to teach this course, and he enthusiastically approved the lectures for publication. Dr. Walker Trimble did very careful proofreading. I am grateful to everyone. However, all errors in the book are mine alone.

INTRODUCTION

All economics students should read two of Adam Smith’s books, and students in this course read the two crucial books. The books are, first, *The Theory of Moral Sentiments* (1759) and, second, *An Inquiry into the Nature and Cause of the Wealth of Nations* (1776). Smith (1723–1790) was a professor of moral philosophy at the University of Glasgow in Scotland.

If you are now a student in this course, you can expect to read *The Wealth of Nations* only at the end of the course. Meanwhile, you will read *The Theory of Moral Sentiments* first, and next you will study some recent work on the crisis in twenty-first century neoliberalism. Then, in the middle of the course, you will study how, after Smith’s death, early-nineteenth-century British writers constructed economics both as a set of political policies and also a body of academic theories. Students in this portion of the course study William Godwin (1756–1836), Jeremy Bentham (1748–1832), Thomas Malthus (1766–1834), David Ricardo (1772–1823), and others. We will also look midway in the course at two standard current academic commentaries on Smith, one from Athol Fitzgibbons and the second from Emma Rothschild. The first demonstrated the influence on Smith of ancient writers, especially Stoics, and the second demonstrated French influence on Smith. Students are asked also to observe and take notice of the essays of Smith’s cousin and close friend the Scottish philosopher David Hume (1711–1776). People often use the French phrase *laissez-faire* (let it be, let it pass) to describe free trade economic theories, and Hume seems to have introduced that French phrase into English. Both Hume and Smith loved France, and they read many French

philosophical writers. The marquis de Condorcet (1743–1794) was a particular favorite of Smith's.

You should expect in advance that the course will challenge two standard views.

First of all, it will robustly challenge the view that twentieth-century neo-liberal economists often took of Smith. They oversimplified things. By their theory, laissez-faire capitalism arose together with English-speaking democracy, and Smith was the intellectual father of laissez-faire. It was more complicated than that.

The course will also very mildly challenge the more general opinion that Smith initiated classical economics, and Malthus and Ricardo were also classical economic writers, but they are all now obsolete, their views surpassed by W. S. Jevons (1835–1882), Léon Walras (1834 — 1910), and many others who later added mathematics and the concept of marginal utility to economics. While this second opinion is largely correct, it still needs to be supplemented and refined.

The course will challenge these views in three ways.

First, we will apply to economics some methods that are now currently used by many historians of science. According to these methods, seventeenth-century and eighteenth-century British science — they called it natural philosophy then — was not the progressive discovery of objective truths about nature. Natural philosophy was instead a human construction. Historian Lorraine Daston made this point in her 1988 book about classical probability in the enlightenment, and so did Steven Shapin in his various histories of science. We will say therefore many of the same things about eighteenth-century political economy. We must understand Adam Smith's ideas in their original social context. Smith and his followers created or confirmed new concepts about labor or capital, for instance, but they did so in the context of existing moral philosophy.

Second, we will also argue that classical economic theory was not all of a piece. That is obvious when you think about it. We will highlight in particular the differences which separated Smith from Malthus and Ricardo with regard to mathematics, for instance. Smith's version of classical theory had simple arithmetic, but it had hardly any higher mathematics, and that was no disadvantage. Better no higher mathematics than bad higher mathematics. Bentham, Malthus and Ricardo used higher mathematics far more often than Smith did, but in vain. They looked backward to ancient Greek higher mathematics, and they did not look to modern methods such as mathematical probability. Jevons, Walras, and other later economists did use modern

mathematics, and they made important advances. Even so economics did not become a fully predictive science as a result, and it is not one now.

Third, the course will make you aware that some people dismantle *The Wealth of Nations* and connect the shattered bits of it to the politics of our own day. We will argue instead that Smith's early criticism of selfishness can suggest a balance for his later emphasis on a natural or unregulated liberty for markets and self-interest. You can find this criticism of selfishness in *The Theory of Moral Sentiments*. It was Smith's favorite among his books, and he turned back to revise it at the end of his life, burning his notes for other projects. We will say that the book's notion of moral sentiments was based on utilitarian philosophy and therefore that its criticism of selfishness reflected utilitarian notions of pity and benevolence. These notions of pity and benevolence in turn were consonant with the politeness and moral obligation that went with social rank and status in the eighteenth century. We will read *The Wealth of Nations* in that context.

Thus Smith's actual legacy resembles a palimpsest. Maybe that word is unfamiliar to you. A palimpsest is a document, often parchment, upon which two texts were written, the second one on top of the first one. The first was scraped off or covered over so that a second text could be written over it. The word "palimpsest" is a noun, but cultural historians now sometimes also use it as a verb. You could say for instance that Soviet power tried to scrape off and overwrite previous Russian culture, but then after the fall of the USSR the Soviet text was itself scraped off, and previous Russian culture reappeared. Smith's legacy is like that now. Later economists wrote their later, standard view over his theories, placing their emphasis only on Smith's early anticipations of his later theory in *The Wealth of Nations*. We try in this course to recover his original system as a whole, including his moral philosophy with its early criticism of selfishness and its utilitarianism. We will argue that these prescriptive elements in Smith's original moral theory were an important context for his subsequent theories about markets and public policy.

Our class is in English. We will read *The Theory of Moral Sentiments* now, and we will use it to introduce Adam Smith, and then we will read *An Inquiry into the Nature and Causes of the Wealth of Nations* at the end of the course. You will improve your knowledge of English by reading Smith's famous books in the original, but you can instead read them in Russian translation if you wish, and you can even read the lectures for this course in the Russian translation as well if you wish. These lectures have been published in Russian as *Adam Smit i neoliberal'naya ekonomika. Uchebnoe posobie*. St. Petersburg: St. Petersburg University Press, 2016.

LECTURE I. GREED

We will focus now on chapter I of part IV of *The Theory of Moral Sentiments*. A somewhat obscure passage there became later perhaps the most famous bit of writing in the whole history of political economy. The passage was about an “invisible hand.” It ran as follows:

The produce of the soil maintains at all times nearly that number of inhabitants which it is capable of maintaining. The rich only select from the heap what is most precious and agreeable. They consume little more than the poor, and in spite of their natural selfishness and rapacity, though they mean only their own conveniency, though the sole end which they propose from the labours of all the thousands whom they employ, be the gratification of their own vain and insatiable desires, they divide with the poor the produce of all their improvements. They are led by an invisible hand to make nearly the same distribution of the necessities of life, which would have been made, had the earth been divided into equal portions among all its inhabitants, and thus without intending it, without knowing it, advance the interest of the society, and afford means to the multiplication of the species.

Let us analyze this famous “invisible hand” passage from three points of view. First, we will look at the plain meaning of the passage. Second, we will see the passage in the context of the chapter of which it is a part. We will deal with those two points of view in this lesson, and we will deal with contemporary economic crises in the next lesson. We will then return to our third point about Smith’s invisible hand in the third lesson, placing his notion then in the broad context of British utilitarian philosophy.

Here is the plain meaning of this particular passage. It was about greed.

Smith’s students knew very well that Christian moralists condemned greed. Early Christians thought poverty was a precondition of right action. A famous passage in the tenth chapter of the Gospel of Mark (vs. 23–27) ran as follows.

And Jesus looked around and said to his disciples, “How difficult it will be for those who have wealth to enter the kingdom of God!” And the disciples were amazed at his words. But Jesus said to them again, “Children, how difficult it is to enter the kingdom of God! It is easier for a camel to go

through the eye of a needle than for a rich person to enter the kingdom of God.” And they were exceedingly astonished, and said to him, “Then who can be saved?” Jesus looked at them and said, “With man it is impossible, but not with God. For all things are possible with God.”

Notice how severe this was.

The apostles and early Christians were to give all. All. In the fifth chapter of The Book of The Acts of Apostles, the fifth book of the New Testament, Saint Luke, if (as many people presume) he was the author of Acts, told the story of Ananias and Sapphira. The story condemned greed with great force. Ananias and Sapphira were members of the new Christian community, and they were pressed to sell all their property and give the money up for the community to use. Ananias and Sapphira sold their property, but they kept back a portion of the proceeds, and for this they were struck dead. The Apostle Peter said they were killed because they lied to God.

Smith said greed was an evil, but he also thought that greed could sometimes be restrained by the natural course of things and therefore in that case it would not be harmful to society. He and his contemporary readers all knew that, in contrast to the gospel, many ancient pagan moralists also condemned greed but they had nevertheless thought that wealth was a necessary context or precondition for right action. These ancient moralists thought you could not act rightly if you were a slave or a poor or homeless person. Only free men could be brave or liberal or generous, and a least some wealth was necessary for free men to do these things, these moralists thought. Since ancient moralists allowed that the wealthy man often gave benefit to the community, Smith’s contemporary readers would have thought this was a grudging defense of wealth but not a defense of greed. The Roman Catholic English poet Hilaire Belloc (1870–1953) summed up this point in a few lines of poetry:

Lord Finchley tried to mend the electric light
Himself. It struck him dead:
And served him right!
It is the business of the wealthy man
To give employment to the artisan.

Compare this poem from Belloc with the similar view of Aristotle (483 BC–322 BC). Aristotle was a very great moralist. He was a student of Plato (c. 428–348 BC), perhaps the most famous ancient philosopher. Aristotle was also the teacher of Alexander the Great (356 BC–323 BC).

Aristotle received many lavish gifts and great favors from Alexander. Aristotle thought such liberality was a proper restraint of greed. Liberality was

therefore a cause of right action in the case of princes and rich men. While moderation was the hallmark of good taste for a man in private life, moderation was not suitable for princes or for very wealthy men. They should be very liberal or generous with their wealth, benefitting the commonwealth with public works. They should build buildings and sponsor religious festivals and athletic contests. They should also be brave, themselves serving the state in time of war. They needed to be not moderate but instead, in a word, magnificent. By being magnificent, the rich displayed both courage and justice. They were liberal. They were generous. They acted well.

Selfishness. Besides Christian morality and ancient pagan morality, Smith and his contemporary students and readers were also familiar with a third and to them both notorious and recent discussion of selfishness, that of Thomas Hobbes (1588–1679). In his book *Leviathan* (1651), Hobbes said that self-preservation was the only human impulse that men and women carried with them out of nature and into civil society; therefore the state by right should command the property of its citizens, rendering impotent their selfish impulses such as greed.

Bernard Mandeville (1670–1733) also influenced Smith. Like Hobbes, Mandeville doubted that voluntary generosity was a sufficient antidote for selfishness, and Mandeville said so in his *Fable of the Bees* (1714). However, he said that private vices such as greed led to public benefit because greed for instance stimulated production and trade in a way that virtue and thrift would not do. Many of Smith's contemporaries thought that Hobbes was an atheist, and they thought that the philosophy of Mandeville was an outrage.

In making greed beneficial, Mandeville broke with Hobbes, and Smith agreed with Mandeville. People could act selfishly — viciously and without thought for others — but they would strengthen society unawares, said Mandeville. He thought the pride and caprice of rich persons would be an involuntary restraint on greed. Remember again that Belloc and Aristotle both said instead that the benefit of wealth depended on the voluntary generosity of rich men. The rich would benefit the poor voluntarily. Remember that Hobbes would have men and women curb their selfishness, but he thought that they would not do so voluntarily, and they must be commanded to do so by the sovereign, the state.

Smith sought to avoid the evil reputation of Hobbes or Mandeville. Smith's innovation was twofold. First, he extended the ancient justification of wealth and applied it to greed. We compared Smith with Aristotle and Belloc. They all three said that greed was bad. Smith merely added first that greed also posed no barrier to wealth's being useful to the community. Secondly, like

Mandeville, he also made greedy rich persons the involuntary benefactors of the community. Smith said that the rapacious rich would benefit the poor without intending that benefit. Pride and caprice could restrain greed.

Let us place Smith's "invisible hand" passage in the context of the chapter in which it appeared. In detail, his argument in the chapter as a whole was in the form of a syllogism. A syllogism is a rhetorical device. It consists of three parts, major premise, minor premise, and conclusion. The syllogism persuades by packing its main argument into the first bit, the major premise. If you do not object to that premise right from the start, then you are stuck with the conclusion. The usual examples of syllogisms are as follows.

All men are mortal.

Socrates was a man.

Socrates was mortal.

Again:

All dogs bark.

Spot is a dog.

Spot barks.

Smith argued at the head of his chapter that whatever is useful is also beautiful. This claim was a bit novel because most people would assume Plato's analysis that beauty reflected ideal realities. (Plato called these realities the forms. He said that the human mind had innate knowledge of the forms. Therefore knowledge of them did not come from sense data. We will talk more about innate knowledge and sense data later when we talk about utilitarian philosophy.) Smith said instead that we find something beautiful when we find it useful, and therefore our sense of the beautiful and the good arises from our sense experience. He claimed also that most people were already of this novel opinion. So it was all a bit of a trick, this chapter by Smith. You could reject his beginning argument, and you could say that the syllogism was valid logic but not sound fact. If you did not reject his beginning argument immediately, however, then you were stuck with greed's being useful, and therefore beautiful after its fashion, and therefore good. That was the way the syllogism worked. Very clever.

How did people understand Adam Smith's syllogism about greed before they thought that utility was part of economics and that economics was a scientific discipline? Reading his work as moral philosophy, they asked what he considered to be natural restraints and what he considered to be civil or moral restraints. Let us turn to these points in the next lesson but one. We will discuss current economic views of selfishness first.

LECTURE II. THE TWENTY-FIRST-CENTURY ECONOMIC CRISIS

That greed is good became the tag line for the world recession of 2008. The character Gordon Gekko personified greed in Oliver Stone's 1987 movie *Wall Street*. In the intervening years, rich people in America gobbled an ever-increasing proportion of national income, and they continue to do so today. Other Americans either became poorer or else at best stayed the same. Here are some figures, for instance.

For 2015, the top 10% (in terms of income) of all (US) tax returns collect 45% of all income. They also pay 82% of all income taxes. The top 5% of all tax returns receive 34% of all income and pay 71% of all income taxes. The top one percent of all tax returns receives 19% of all income and pay 49% of all income taxes.¹

Keep in mind that the 2008 recession left many adult Americans unemployed or in very poorly-paid employment. Perhaps half of them remain without satisfactory employment. For that reason, they have few retirement benefits and they also often still lack adequate health insurance. This group pays little income tax although they pay a higher proportion of their income in sales taxes than do the rich. States and local governments in the USA often depend very heavily on these sales taxes which the poor cannot escape.

Rich Americans in recent decades have been very successful in reducing their federal and state income tax burdens. Here are some data on that point.

In 1995, the 400 highest income Americans paid just under 30% of their adjusted gross incomes in taxes. By 2012, the most recent year available from the Internal Revenue Service, their tax rate had dropped to 17%.

Most of this is attributable to changes in the law.²

Let us take a concrete example of personal tax reduction from the Mid-western state of Illinois. The state was traditionally Democratic with very few

¹ http://www.forbes.com/sites/robertwood/2015/03/04/warren-buffett-to-al-sharpton-the-1-makes-19-of-all-income-pays-49-of-all-taxes/?utm_campaign=yahootix&partner=yahootix This and all following Internet links were accessed on April 16, 2015.

² http://www.forbes.com/sites/robertwood/2015/03/04/warren-buffett-to-al-sharpton-the-1-makes-19-of-all-income-pays-49-of-all-taxes/?utm_campaign=yahootix&partner=yahootix

Republicans in its statewide offices. The 2008 recession hit the state government very hard, and it became insolvent. The governor and legislature raised the state income tax on a temporary basis to help them to defray these bills, but a previously little-known billionaire emerged as the Republican candidate for governor. He wanted to allow the temporary income tax increase to lapse, and he wanted to pay the state's bills by cutting its budget. He wanted especially to target pensions for retired state employees, and he also targeted health care for the poor and state services for children and the elderly, saying these were a waste of money. He won, defeating the incumbent Democratic governor. The Republican billionaire spent many tens of millions of dollars of his personal fortune, spending more than thirty-six US dollars for every vote that he received in the general election, and he took office in January 2015. The temporary income tax increase lapsed, and the new governor saved nearly one million dollars per year on his own personal state income tax in consequence.

Political observers always said that Illinois was a bellwether state. It is so now, alas. Billionaire politicians seek direct or indirect personal control of other state governments and the federal government in Washington as well. Republican US senators for instance often propose large cuts to the federal income tax liabilities of rich people, proposals similar to policies of the new governor in Illinois. Here is what a commentator said about the newest such federal proposal.

"The big losers under the Lee-Rubio plan, therefore, would be the working-poor people who feed and bathe the elderly, care for preschoolers, clean offices, and perform other essential tasks. The big winners would be the country's highest-income 400 filers, at a cost of much higher deficits."¹

The American gap between the rich and poor is egregious, a word that means flagrant, conspicuous and shameful. Though now egregious, this gap is nevertheless not new. The example that comes to mind is the character Trimalchio from *The Satyricon* attributed to Gaius Petronius Arbiter (27–66AD). These days few Americans read this Roman novel, but there is a translation online in English.² There is also a fine Russian translation.

Smith and his students and colleagues were more likely to have read it because Dr. Samuel Johnson the lexicographer (1709–1784) praised it as the best example of pure Latin style. Trimalchio was immensely rich, but he was a freed slave. Keep in mind what Aristotle said about slavery. It was a de-

¹ http://www.huffingtonpost.com/chuck-marr/lee-rubio-tax-plan-huge-n_b_6803548.html?n_cid=txtlnkusaolp00000592

² <http://www.igibud.com/petron/petron.htmltranslation>

meaning condition. It robbed a man of virtue. A slave was incapable of being either brave or generous. Petronius made Trimalchio from these materials. The fictional character was without good taste, without moderation, without scruple, without concern for the public good, without bravery, without magnificence. Although bitter satire, the image was very close to reality. Rich Americans now too often resemble Trimalchio.

If anyone should now use Smith's name to justify such egregious greed, then that usage is wrong. On the contrary, Smith was a professor of moral philosophy. He taught his students precisely those qualities that they would need to be freeborn subjects of the British crown.

Smith was a proponent of propriety, moral sentiments, and benevolent actions. Let us turn to his moral philosophy now.

LECTURE III. MORAL PHILOSOPHY

Let us as promised follow Smith's argument about greed in his own terms of moral philosophy. He presumed the following points. Liberty is the absence of restraint. Please note this definition carefully. It is the standard definition of liberty according for instance to *The Oxford English Dictionary*. The entry there gives the example of a bird in a cage. The cage is the restraint. Remove the cage, and the bird is at liberty. This definition is vital to understanding Smith's moral philosophy. Any other definition of liberty will muddle Smith's argument. While liberty is the absence of restraint, so natural liberty is the absence of all restraint save that of nature. Our greatest eighteenth-century American philosopher Jonathan Edwards (1703–1758) said that you may wish to jump one hundred feet in the air, but you cannot will to do so because nature restrains you. Natural restraints are necessary but not sufficient for civil society. It requires additional civil or moral restraints. For instance, we humans have in the state of nature the power to kill one another, but most philosophers agree that civil society is not possible unless individual citizens surrender that liberty so that the sovereign power has a monopoly over violence. Similarly the sovereign power imposes other civil restraints upon us, but we impose moral restraints upon ourselves. A moral restraint would be for instance the prompting of conscience.

Famous writers set out the basic natural and civil or moral restraints. If you read the scholastic philosophy of St. Thomas Aquinas (1225–1274), for instance, you discover that he claims a truly astonishing range for natural law. He said natural law provided so many restraints that someone might almost think there is no need of any civil restraint in addition to natural restraints. Natural law even preserves private property from unjust seizure by the sovereign according to Aquinas. If on the other hand you read the English philosopher Thomas Hobbes, whom we mentioned earlier, you find the other extreme. He put little store in the prompting of conscience. Almost all restraints are civil, neither natural nor moral. Hobbes said that we made a social contract to enter civil society, and by that contract we retained only the natural right and duty to preserve our own lives. We gave to the sovereign power the authority to construct all other restraints.

So Smith said both that greed was bad but also that it was useful. Let us be moral philosophers for a moment. Let us ask him our moral philosophy questions, therefore. What restrains greed in civil society? What makes it compatible with civil society? What makes it useful in civil society? Is the restraint of greed a natural restraint or must an act of the sovereign restrain it, for instance, by an act of legislation? Answer. According to ancient moralists such as Aristotle, voluntary liberality or generosity was the proper restraint on greed. It was a moral restraint, neither a natural nor a civil restraint. Generosity was voluntary. Of course the state could instead compel contribution by requiring the payment of tax.

According to Smith in *The Theory of Moral Sentiments*, by contrast, nature sometimes restrains the greed of rich people in civil society. Generosity was based on justice, he said. Generosity therefore did not restrain the unjust. Benevolence did not restrain them either. Hobbes also thought little of voluntary generosity or benevolence. He thought instead that the sovereign or the state needed to restrain the self-interest of men and women, but Smith did not think that was always necessary. Nature would sometimes do that work, he said. The greedy rich carried that nasty vice into civil society, but there their vice sometimes conferred an unintended benefit. The rich in civil society could consume very little in actual fact. An invisible hand would restrain the rich: it was a natural restraint. Their pride and love of luxury drove them to a pompous production and display of goods. For that vain and foolish purpose, the greedy rich employed many poor people. Thus greed, while ugly and vicious in itself, was a beneficial vice because it gave so many poor people their livelihoods.

LECTURE IV. UTILITY

Smith's use of utility as a concept clearly marked him out as a utilitarian philosopher. We should keep his utilitarian philosophy in mind when we compare Smith with later economic theorists.

Let us first look therefore at how different is the way that economists now use the term "utility," and to do that we shall take two examples of utility from ordinary economic life. First, you could buy an ice cream cone in the United States for five cents in 1950, and in April 2014 an identical US ice cream cone cost five dollars. No matter. One cone is worth the money even at five dollars, you will reply. What about a second cone, however? That would not be so valuable, and a third would be useless. Let us have a second example. Imagine that you own rental property and that you rent the property out through an agent. In order to rent your property, the agent has to get a permit from the city administration. They inspect it and require repairs as a condition of issuing their permit. The agent has to make the repairs or else he cannot rent the property, and it is useless. On the other hand, it is a waste of money to do any repair work beyond that required by the city inspectors. The renters tend to destroy any improvements put into the property, and therefore any money spent on them is useless.

Late nineteenth-century economists bequeathed us the phrase "marginal utility" to describe both of these situations. In the first example, that of the ice cream cones, "marginal utility" describes in economic theory the decline of each succeeding cone in its value or usefulness. In the second example, the rental property, "marginal utility" describes the sharp decline in return on investment. There is a good return when money is spent on those repairs ordered by the city, but there is very little return when money is spent on any additional repairs.

These nineteenth-century notions of marginal utility invited economists to apply qualification and to make predictions in their economic analysis. In many situations, the declining utility of an item resulted in a decline in its price, for instance, and economists hoped that this insight would enable them to make economics into a predictive science. Alas economic correlation was often a very tangled and complicated thing in practice, and prediction of the

future price was usually very difficult. Similarly, in many other investment situations additional money spent might result in additional profits. Again that relationship often was very complicated. Complicated or not, the notion of marginal utility invited and involved the application of higher mathematics to make predictions, and that transformed economic theory. We will return to that point about higher mathematics in a future lesson.

We turn now to the very different notion of utility that Adam Smith took from utilitarian philosophy. The first great utilitarian writer was the third earl of Shaftesbury (1671–1713), a major English philosopher. He influenced Smith through Smith's teacher, Francis Hutcheson (1694–1746). As usual in western philosophy, however, it is best to start with the Greeks. In this case, we start with Theophrastus (c. 371–287 B. C.), first a student of Plato and then the student, colleague, and successor of Aristotle. "Theophrastus" was a nickname given him by Aristotle. The nickname meant "divine eloquence."

When Shaftesbury wrote a book called *Characteristics* (1711) he quoted Theophrastus because the title of the book came from Theophrastus. In Greek, the word "character" meant the image of a face on a coin. In those days, coins were made by hand. Today factories make most coins, and within the same denomination each new coin is nearly identical to any other. Then each coin, however similar, was still a little different. Theophrastus said people were stamped out like handmade coins, and each was a little different, but in general there were only a few major types or variants. The range of human characters was limited in the same way that a mint limited the variants of its coins. He also connected personality with personal appearance. Thus he made a complete catalog of human types.

Theophrastus thought personality and appearance depended on the four humors. Galen of Pergamum (129–216), a Greek physician who lived in Rome, made this medical notion very famous. Ancient medicine was pretty awful in practice, by the way. No wonder the enduring medical maxim was first of all to do no harm. Doctors killed many more people than they cured until about 1890. They bled people for instance.

As usual with the Greeks, the physical science underlying this philosophical teaching was nonsense, and in this medical case the accompanying interventions were pernicious, but this philosophical theory remains very interesting to many people. The four humors were earth, air, fire, and water. Doctors said that these mixed together to form the human body. Health consisted of the correct mixture or temper, and illness of an incorrect mixture. Doctors bled people to reestablish the right temper or balance of the humors. They also thought that the heavenly bodies influenced the mix. Many doctors were

also astrologers. The word "influence" — modern "flu" — remains with us. The notion that imbalance caused illness was not confined to the Greeks. It spread widely in the medieval world in part because Chinese doctors shared Greek teaching for instance. The tendency to blame malign outside influence was also very common in Asia. The Japanese blamed flu not on the influence of the heavens but on bad air or wind. When you have a cold, they still say to this present day that you have a little wind.

Theophrastus thought that the humors mixed together in a finite number of ways and therefore his study of them yielded him the complete range of possible human personalities. He wrote this analysis up in a book. The theory that the four humors influenced personality had a huge impact.

The most direct recent occurrence of this system in popular English literature, to my knowledge, was in the Jane Marple stories by the detective writer Agatha Christie (1890–1976). We will use Miss Marple to understand Theophrastus on character. She was a fictional character herself, said to come from a small and fictional English village, Saint Mary Mead. Miss Marple met many people in the great world, but she almost always could compare anyone she met there, however grand, to someone ordinary whom she knew in her humble village. This enabled her to put aside pretense and to analyze motives and predict behavior. That was Theophrastus. A limited number of types. Everyone can be fitted into the system. Prediction results.

Theophrastus had a huge impact on western painting. Permit me a couple of examples. The Italian painter Titian (c. 1489–1576) was a servant of the Habsburg imperial court. His painting *Ecce Homo* (*Behold Man*) is in the Saint Louis Art Museum in America.¹ A wonderful painting. You see three male figures, a young boy with a burning torch, the boy with the unmarked face of youth and good health, Christ in full manhood, also in the bloom of health but humiliated and abused, and Pontius Pilate dressed in gorgeous robes and jewels but aged, jaded, and bilious. Behold the three ages of man. Youth, full manhood, and old age. Health and sickness. Virtue and vice. Behind them flares the flame of the boy's torch. God is a flaming fire, Saint Paul told the Hebrews. If you are in Saint Petersburg, you can see a wonderful Titian in our State Hermitage Museum. It is labeled in English "girl with a fur," and she is partly naked with a feather hat and jewels. Titian was a man of the imperial court. This time the same finery that he used for Pilate — the signs of power and wealth — adorn the nearly naked girl. Again also she has youth and good health, but the boy with the torch was in better company, no

¹ <http://www.slam.org:8080/emuseum/view/objects/asitem/items@:33862>

doubt. “Better fortune thine, and better hour,” as the poet Edmund Spenser (c. 1552–1599) said.

Well, three examples of painting. If you go to the Hermitage to see the Titian, as I strongly recommend, and if you have a student ID, then you can get in for free. While you are there, you should walk over to see the portrait of John Locke (1632–1704) by Sir Godfrey Kneller (1646–1723). It is the most famous painting of Locke, and it is also one of Kneller’s best works. Again, you see that ancient Greek medical notions had some impact on the painting. Remember the four humors. Plump people were ruddy and jolly. The Locke of the painting was not like that. He was an old man, and a bit thin, dry and cold, not plump or ruddy, but he still had a sharp glance and a look of wisdom and honesty — and basic good health especially in old age. I am not sure how true to fact that was since Locke was often sick especially in his old age, but painters, like poets, feign, and it is a good painting anyway.

Locke was Shaftesbury’s tutor, and whether or not Locke himself was healthy, his system of philosophy was not sound. It was faulty, and Shaftesbury borrowed the characteristics of Theophrastus to solve the chief problem in that system of philosophy.

Here was the fault. Locke used a simple sense-based epistemology. The fault was precisely that this system of epistemology did not give him a firm foundation for his theories of right action. He failed to solve that challenge. Here is background for understanding Locke’s failure.

In general, there are two branches of western philosophy, metaphysics and epistemology. The first deals with being and claims of being. You make a metaphysical statement whenever you say that something exists. Epistemology deals with the theory of knowledge, especially with the question of how we acquire knowledge. How do you prove a claim of being? If you say something exists, then how to you prove it? Sense experience gives the most obvious and widely accepted type of proof. We usually say we have five senses, taste, touch, smell, vision, sound. Even animals accept sense experience as proof that something exists. The ancient Roman Stoic philosophers said that there is nothing in the mind that is not first in the senses. As they implied, the simplest and least complex system of philosophy consists first of accepting sense experience as the sole proof of all metaphysical claims and second of leaving unexamined and unproved any metaphysical claims that do not admit of an epistemological proof based on sense experience. I know my table exists because I see it in front of me. I can see it and touch it as I write. On the other hand, I do not have the same evidence for claims such as the ones that Plato made in *The Republic*. He said that the human soul is immortal and filled

with knowledge of eternal and perfect things. I cannot disprove Plato either of course. Unfilled and unexamined are those Platonic metaphysical claims on this simple system of sense-based epistemology. This was why Smith said utility was the basis of beauty. Beauty, in other words, is a product of our sense experience.

The problem is that when you base epistemology purely on your sense experience, then you have difficulty explaining beauty — or moral responsibility. If, as Plato said, you have an innate knowledge (or memory) retained in your mind at birth, then you have sure knowledge of the beautiful and the good. If instead — as Smith said — utility alone determines your judgment, reason becomes merely the last dictate of the understanding, the sum of your sense experience. Sense data goes in, action comes out, and your mind couples them together. David Hume said that he looked into himself and saw nothing answering to the mind or self of which consciousness would be a function. He meant that the human mind is a mere black box. It knows of itself neither beauty nor ugliness, neither good nor bad.

In struggling with these difficulties, by the way, Locke made a major contribution to the English language. He made current and common in English the Greek word “idea,” until then in English only a rare bit of Platonic jargon. Locke tried to explain how a material object, the eye, could convey sense impression to the mind or spirit. He said that the impression was conveyed as an idea, and the word became a commonplace.

Bodily circumstance and appetite — character — melded together with past experience. Locke’s solution was fudge. Past experience determined the mind but people still had some free will, he said. Shaftesbury’s correction of this fudge became very famous. The third earl used Theophrastus for this purpose. Shaftesbury said that no, there is nothing in the mind that is not first in the senses. No, no, no. No innate ideas, no free will. The mind was determined by prior sense experience. However, prior sense experience was not the sole determinant of human action. Character also molded action. So did bodily circumstance as well as appetite. Your emotions, past sense experience and your medical condition melded together to make character or personality, and they were the context in which you reacted to external circumstances. If you acted rightly, in other words, that was in part due to your character. Ditto if you acted badly.

Pity was the motive for right action, said Shaftesbury. Because of personality or character, some people feel pity for others. This pity was often called “sentiment” in the eighteenth century. It is the basis of Smith’s title, “moral sentiments.” When you act out of pity for others, you act well, but you also

act involuntarily. Reason remains the last dictate of the understanding. A mix of sense experience and sentiment impels your understanding.

Jonathan Edwards hated Shaftesbury's notion that pity was the basis of moral action. Edwards called it a morality without God. Edwards thought that human pity was usually only a disguised form of self-love. All such pity was self-pity. You can see why Edwards said this. Shaftesbury upheld a medical theory of morality, and he taught a doctrine of medical moral restraints. Virtue and vice therefore would both be results of natural phenomena. You could not help feeling pity. You could not help yourself on the other hand if you were greedy. How should we apply to Smith this objection that Edwards made to Shaftesbury?

When you read of the invisible hand, you should think that natural philosophy and mathematics were Smith's favorite subjects when he was a boy in school. Although he became a professor of moral philosophy, he did not take up the hard philosophical question of causation that his friend and relative David Hume so ably discussed. If you are interested in that hard philosophical question yourself, however, I recommend that you read about occasionalism. You can begin to do so on the Internet.¹ Muslim students might find occasionalism of special interest because it clearly demonstrated the brilliance of medieval Islamic philosophy. People now think that the Persian mystic al-Ghazali (1058–1111) anticipated some points of current quantum physics. He certainly anticipated many points of the most famous European occasionalist, the French philosopher Nicolas Malebranche (1638–1715). Malebranche influenced Hume on the subject of causation. By the way, Malebranche may also have influenced Jonathan Edwards. On the other hand, Edwards may have arrived at these notions independently.

Edwards was a direct influence on Henry Home, Lord Kames (1696–1782). Kames was a mentor to both Hume and Smith when they were young men. Kames borrowed many notions from Jonathan Edwards. In his lifetime, Kames was a more famous philosopher than either Hume or Smith.

As I said, Smith became a utilitarian, not an occasionalist. Perhaps he did not want to compete with the brilliance of Hume. Smith found his own task, and it made him stand apart and stand out. Nevertheless, a full understanding of Smith should place his thought in its philosophical context. The philosophy of Berkeley, Edwards and Malebranche was part of that context.

Back therefore to Smith. Back to utilitarianism. If beauty depended on utility, as Smith said it did, then an object was not beautiful in itself. Nor did

¹ <http://www.iep.utm.edu/occasion>

something beautiful resemble something transcendent and eternal, as Plato said it did. If you took Smith's theory of sense data as the basis of beauty, and if you said that pity and other sentiments were the only basis of right action, then utility became very important. The only way you could judge something was by your senses, and they told you only whether or not something had utility (or was useful). An object was beautiful to you therefore only because your need of it made it useful to you. In the same way, the sentimental person, feeling pity, might do good, but he or she could not do otherwise, and the same was true of bad things done by bad people. You could not help yourself whoever you were, and your moral calculation depended partly on the balance of your humors, a medical condition.

Think carefully therefore on the objection made by Edwards to Shaftesbury. Some people called Shaftesbury a "moral sense" philosopher. Morality becomes a bit mechanical, if we follow Shaftesbury's views on the moral forces at work in society. They may bring about restraint, but they do so by chance and without transcendent moral purpose. So with the invisible hand. Was Smith's notion of the invisible hand a morality without God? Could we say of Smith what the French mathematician Blaise Pascal (1623–1662) said of the universe as revealed by the Polish astronomer Nicholas Copernicus (1473–1543)? Aristotle spoke of a music of the spheres, meaning the cosmos was based on a system of ratios similar to musical harmonies, and he also thought the universe was finite. It was a closed system filled with its beautiful harmonies or ratios.¹ Copernicus by contrast said that the fixed stars were at an infinite distance from the earth, eternal, and he did not see in them a system of harmonies. Pascal remarked that the eternal silence of those infinite spaces terrified him.

Where did Shaftesbury get his medical notions of morality? Remember that John Locke was a medical doctor by training and profession. Remember that he was tutor to the third earl. No doubt he taught the third earl something about medicine and the four humors. He also taught him something about natural philosophy, what we now call science. We can imagine therefore that the young student corrected his elderly teacher's faulty moral philosophy lessons with the material that Locke had taught him in the previous lessons on medicine and natural philosophy.

Pity and utility had a very long run in British philosophy. They were enshrined for instance in the famous book *On Liberty* (1859) by J S Mill (1806–1873). Mill set aside any discussion of internal or mental liberty, and he said

¹ Arthur O Lovejoy, *The Great Chain of Being* (Cambridge: Harvard University Press, 1936).

that his discussion of liberty applied only to the presence or absence of external restraints, civil or moral restraints. He argued that the sovereign power was justified in restraining an individual only when that person's actions tended to harm another person. He went on to say that the sovereign does not need to enjoin benevolent actions. Civil restraints can prevent the bad people from harming others, but civil restraints cannot propel bad people into goodness. Some people will have pity for others, and that sentiment will lead them to involuntary benevolent actions even at their own cost or inconvenience. Some people will not have pity. They may be satisfied, but their satisfaction is like that of pigs. It was already a famous image. "No one is richer than a pig" was an ancient saying. Better to be a Socrates dissatisfied than a pig satisfied, said Mill. He went on to say that public opinion in Britain was often a more effective restraint on bad actions than were the courts and the law. No one wants to be thought a pig.

Over the decades, Shaftesbury's notion that pity was the basis of moral action evolved and changed. By Mill's day it was a mature system of philosophy, utilitarianism. We will continue to discuss utilitarian philosophy in the next two lectures.

LECTURE V. EARLY UTILITARIAN PHILOSOPHY

If you read page one of *The Theory of Moral Sentiments*, you will find that it announced itself as a piece of utilitarian philosophy. It praised propriety, sympathy, and pity, and it condemned selfishness. The first page announced that those were the whole book's main themes. Selfishness was an evil and propriety, sympathy, and pity were its restraints, so Smith said. If we turn to the first page of the first chapter of the second section, we find a discussion of beneficence and pity. Beneficence was the behavior consequent upon pity. Beneficence was not based on self-interest. We see someone who suffers, and we act to relieve that suffering, but our action does not serve our self-interest. We are beneficent when we act out of pity, and we are selfish when we do not. Beneficence is not voluntary since we cannot help ourselves when we feel pity, but beneficence is not forced upon us by external circumstance. Smith contrasted beneficence with justice. If we see suffering, and if the sovereign commands us to relieve it, then we have acted well when we do so. In the language of moral philosophy, therefore, selfishness was an evil, and sympathy and justice were its two restraints. The first was a sentiment. A sympathetic person did a beneficent act as something involuntary, natural, internal, and unforced. The second, a just act, was not sentimental nor was it voluntary. It was done under external compulsion because at a command of the sovereign.

Adam Smith learned this utilitarian brand of moral philosophy from his teacher, Francis Hutcheson. Hutcheson was what Scottish university people then called a New Light. He lectured in English, not Latin, for instance.

Smith also learned from Hutcheson the whole agenda of the Scottish enlightenment. For a time, Scotland was in advance of England as a center of learning and progress. We will concentrate on one aspect of the Scottish enlightenment, the importance of sociability. Utilitarianism and sociability went together. The eighteenth-century word "sociability" meant what scholars now call "social capital." People in Scotland knew one another and interacted with one another so that they formed an intellectual elite. Here is the definition of social capital from the World Bank.

Social capital refers to the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions. Increasing evidence shows that social cohesion is critical for societies to prosper economically and for development to be sustainable.¹

Sociability corresponded to Shaftesbury's politeness. According to a book by Lawrence E. Klein,² politeness was the key to utilitarianism. It was the key to Shaftesbury's notion of pity. Let us follow this line of thought.

The third earl was a high aristocrat, charming, casual, devoted to good taste and good manners. He was from one of the most prominent English families of the seventeenth century. His grandfather, the first earl, was a leader during the Civil War of the middle seventeenth century, and the first earl also opposed King Charles II after the king was restored in 1660. The Civil War was a terrible thing in Britain. You see what great harm a similar war did to Ukraine during 2014. The war in Britain continued longer and was even more deadly. Thomas Hobbes who lived through those times thought that civil war was the greatest of all political calamities.

The connection between Locke and the first earl of Shaftesbury arose in a sociable manner.

Once when the first earl was taken ill, he called in the local physician. By chance Locke was that man. He had studied medicine at university and entered medical practice. Locke decided to operate on the first earl, a dangerous procedure, but it was successful, and he saved the first earl's life. Having found a doctor who understood his case, the first earl made Locke a permanent part of his household. In this way, Locke eventually became the tutor of the third earl.

As you read the first page of *The Theory of Moral Sentiments*, remember that Hobbes was the adversary. Hobbes said that selfishness was the basis of human nature. Look for contrary notions of politeness and sociability in *The Theory of Moral Sentiments*, and you find they dominate the book. I say again that they are the moral sentiments of its title. Smith identified Shaftesbury's utilitarianism and politeness with sociability, we would say with social capital, and Smith supposed all these things would restrain selfishness. Smith learned all this from Hutcheson.³

¹ <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTSOCIALCAPITAL/0,,contentMDK:20185164~menuPK:418217~pagePK:148956~piPK:216618~theSitePK:401015,00.html>

² *Shaftesbury and the Culture of Politeness: Moral Discourse and Cultural Politics in Early Eighteenth-Century England* (Cambridge: Cambridge University Press, 1994).

³ See for instance John Dwyer and Richard B Sher, eds., *Sociability and Society in Eighteenth-century Scotland* (Edinburgh: Mercat Press, 1993).

Turning to the first page of the fourth chapter of section II of *The Theory of Moral Sentiments*, we find a discussion of sociability. This was politeness by another name. It consisted of small impulses of joy at the details of ordinary life. Good fellowship, for instance, pleased sociable persons. Remember by contrast the rapacious rich from the famous "invisible hand" passage quoted before. The rapacious rich had a faulty notion of politeness. They thought that the display of material goods was enough to mark them off as polite. The right clothes, the right house, the right horses and carriage — that sort of thing concerned them. Smith believed that it was all vulgar display. The rapacious rich were not polite. They lacked propriety. They lacked sociability.

No doubt Smith had more than one source for his various notions of politeness. As tutor to a young nobleman, Smith visited Europe, especially France, met Enlightenment thinkers there, and they influenced him. This was just after 1762. He was then the author of *The Theory of Moral Sentiments*, and not yet *The Wealth of Nations* which he wrote only after his return to Britain. *Moral Sentiments* was popular in France and was eventually translated into French. Emma Rothschild said that Smith read French romance novels, and he had many of those books in his personal library. No doubt those novels supplied him with many models of polite behavior. If society were to achieve a better condition, the marquis de Condorcet thought, then people would need to relish a higher kind of pleasure. They would have to take delight in art and beauty, and they would have to develop that benevolence toward others which of necessity would be engendered by habitual practice of human reason. Athol Fitzgibbons said that ancient philosophers influenced Smith, especially Stoic philosophers. This was all true.

Still, for all of his ancient Stoic and contemporary French influence, Adam Smith was at basis a utilitarian. In *The Theory of Moral Sentiments*, he remained a student of Hutcheson and a disciple of Shaftesbury. Smith thought utility was the basis of beauty. This notion of utility in that book took its meaning from Shaftesbury's polite context. When rich people did not feel pity for others, then for that reason they were not polite. On the other hand, pity and benevolence could restrain the greed of rich people. In that case, pity and benevolence were natural and involuntary restraints like the invisible hand. Smith may well have molded that latter concept on the utilitarian models of pity and benevolence. If so, then utilitarian moral philosophy gave rise to the most famous concept in laissez-faire economic theory.

LECTURE VI. LATER UTILITARIAN PHILOSOPHY

We continue our discussion of utilitarian philosophy. Even though Smith and his immediate successors are all now classified as classical economists, nevertheless they differed in many ways. We will concentrate here on style. By style we mean attitude toward social status. One style, British, was amateur, casual, and aristocratic. It was polite, to use the word that we just discussed. The other, German in origin, did not affect an aristocratic or polite style. It was earnest, hard-working, professional, suited for state or government service, and academic. Economists did not invent these styles themselves. They borrowed them from colleagues in philosophy and history. Utilitarian philosophy for instance provided both the models in succession. It started out as a polite system, its proponents dependent for status on aristocratic patronage, and it became earnest, hardworking, and mathematical. It measured, and it counted, and its followers founded the University of London so that the poor could enter the professions, having obtained higher education on the German model.

Jeremy Bentham was a transition figure. He combined the old polite model of utilitarianism, Smith's model, with a new model by which political economy became a profession and an academic discipline. Bentham wanted the poor to have access to professional and academic disciplines, among them political economy, and therefore Bentham's followers took for instance the very practical but unprecedented step of helping many poor students to enter university. This did more to establish political economy as an academic discipline and a profession than Bentham did by writing books.

Bentham had a connection to Russia through his brother and only surviving sibling Sir Samuel Bentham (1757–1831). We will start with Samuel. A naval engineer and ship builder, Samuel Bentham went to Russia where he became a high official in the imperial service. Prince Potemkin (1731–1791) was his patron. One of the greatest men of the Russian empire, Potemkin was rumored to be the secret husband of Empress Catherine II (1729–1796). Note Samuel's style. He was, in one word, polite. He suggested his innova-

tions directly to great persons, and he depended on them for their patronage. As Samuel rose in the Russian service, he obtained generous rewards, titles, and glittering decorations. Returning to England, Samuel was less successful. Although he became a high official at the Royal Dockyards, he eventually lost his post there and then retired to live in France.

Jeremy Bentham followed essentially the same polite model as his brother, Samuel, although with variations. Jeremy aimed very high, like his brother. Like his brother, too, Jeremy obtained the patronage of great persons from an early stage in life. He later recruited students who became famous and powerful. However, Jeremy did not attain high office for himself. He acted behind the scenes. He was content to see his students achieve political positions instead. For instance, Bentham claimed David Ricardo as one of his disciples.

Although Jeremy Bentham and his followers were polite, and although they depended on patronage and connections to the great, they were nevertheless called "philosophical radicals." The phrase was something of an oxymoron, a contradiction in terms. (The phrase "make haste slowly" is another example of an oxymoron.) On the one hand, "radical" was an old term from the Civil War of the seventeenth century. The word meant "root" as it still does in mathematics. "Root and Branch" was the title of a petition to parliament in 1640, and its advocates were called "root and branch men," radicals, whose proposals for radical reform led to violence and war. In the age following the French Revolution, the English word "radical" was not taken lightly. On the other hand, "philosophic" had a peaceful ring. Argument. Persuasion.

Bentham and his followers embraced this oxymoron. On the one hand, they worked through the parliamentary system. Like so many people of the age of the French Revolution, he and his followers thought possession of state power was the key to historical change, and they sought to reform society through parliamentary legislation.

Bentham trained as a lawyer, after all. As a young legal student, Bentham heard lectures from Lord Mansfield (1705–1793) and Sir William Blackstone (1723–1780). Mansfield and Blackstone were the era's two greatest exponents of English common law. As you see, Bentham knew Mansfield and Blackstone both from his youth.

On the other hand, Jeremy Bentham, like his seventeenth-century predecessors, sought a root-and-branch change in British society. Bentham rejected what Mansfield, Blackstone, and other distinguished lawyers said about the common law's being customary law. The common law was the unwritten law of England and the common custom of the realm, they said. Common law required the unforced and voluntary consent of the people, and custom

gave that consent, the lawyers said. By living quietly under their ancient legal institutions, English people gave their consent to them. For another, the lawyers said that the common law was deeply tied to the established Church of England. From the time of the Protestant Reformation of the sixteenth century, English lawyers held that reformed Christianity was part of the common law.

Bentham said the law was an evil, nothing but the force of the state on the body of the citizen. Custom was humbug, he declared. Talk about custom was a subterfuge by which lawyers concealed the imposition of injustice. The law's connection to Christianity was also humbug. He called it "Church of Englandism." Another subterfuge. Another injustice. Another empty form of words, he said.

Bentham taught his view of law to many very influential students. Aaron Burr (1766–1836) was one of them. The grandson of Jonathan Edwards, Burr became the third vice president of the United States. Bentham found a loyal disciple in Burr. "The law is whatever is boldly asserted and plausibly maintained," said Burr.

Because of his radical views on the law, Bentham was an eager proponent of prison reform. He designed a model prison, and Samuel even persuaded the Russian authorities of the merit of the scheme. American reformers also took up this notion. Prison reform became a favorite cause of many American women. Excluded from public life by a Revolution that did nothing for women, blacks, or Indians, American women found a noble role in the advocacy of prison reform, and then another noble role in advocating the abolition of slavery. Prison reform was Bentham's second most enduring legacy, therefore. The first was the University of London of which more in the following lectures.

So much for the radical part of philosophic radicalism. Let us turn to the philosophy. Bentham was England's most famous utilitarian philosopher.

Recall that utilitarian philosophy descended from the third earl of Shaftesbury. Francis Hutcheson and Adam Smith were utilitarian. Their key notion was sentiment — pity. There was nothing in the mind that was not first in the senses, but sense data did not entirely control human action. Emotion or sentiment also informed actions. Pity and benevolence were the grounds of right action. They were as involuntary as greed or lust. When persons acted under the impulse of pity, they acted involuntarily, but they nevertheless acted well.

Accepting all this, Bentham emphasized mathematics. Hutcheson had already added a bit of mathematics to utilitarian philosophy previously. Bentham spoke of the greatest good for the greatest number. Although he did

not invent that notion or that phrase himself, nevertheless he made the phrase into the epitome of utilitarian philosophy, and he created calculations that appeared to base social policy on an objective measure of pleasure and pain. Some later economists looked back on Bentham's calculations as important contributions to the merger of economics with mathematics.

Bentham earned an important place in the history of English utilitarian philosophy — and classical economics— but his books did not do justice to the man. Most of his writings were boring and long and tedious to read. His best impact was in the hearts of his followers.

Finally, Bentham contributed greatly to the formation of the University of London. As I said, this was his greatest legacy. We will return to it and also to his application of mathematics to economics, but let us first discuss the Prussian and German models for educational reform. The German models provided economists with a different style entirely.

LECTURE VII. THE GERMAN UNIVERSITY MODEL

The French eventually lost their War of the French Revolution in Germany. Nevertheless, they conquered Germany in 1806, and Napoleon began construction in Paris of the Arc de Triomphe as a victory monument. As described in an early section of Leo Tolstoy's great epic *War and Peace*, Napoleon and the French army crushed Austrian and allied armies at the Battle of Austerlitz in 1806. Later that same year, Napoleon also defeated the Prussians at the Battle of Jena. Napoleon remarked that legitimate monarchs could survive defeat after defeat, but a single such loss would destroy him. He was right. This famous sign or notice then appeared in Berlin: "*Jetzt ist Ruhe die erste Bürgerpflicht.*" ("Now is calm the citizen's first duty." "Stay Calm and Carry On" said equivalent British signs during World War II.)

The early French victories had lasting consequences in Germany despite Napoleon's later defeat. For one thing, the French victories left Germany ripe for its unification under Prussia in 1871. Before the French conquered Germany, that would have been impossible because Prussian kings had secured their royal title less than a century before the French Revolution. Before Napoleon, the Habsburg monarchy in Vienna headed a nominal union of Germany, using the styles and titles of the Holy Roman Empire. The empire was not Roman but even so was truly very old, and the Habsburg imperial house fancifully traced its lineage back even to ancient Troy. Although supposedly elective, the imperial throne was filled by a Habsburg monarch time out of mind. After Napoleon dissolved the Holy Roman system, the Habsburg dynasty lost even the shadow of their claim to lead all of Germany. The Habsburg dynasty had to reinvent themselves as emperors of Austria and kings of Hungary. Prussia slowly replaced them.

Prussia rose like a phoenix from the ashes of defeat. The authorities in Berlin aimed high, and they were right to aim high. For one thing, among the authorities in Berlin were very able statesmen who remain famous in German history. Together, they undertook a complete reform of the Prussian state, reforming the army of course but they also reformed the civil administration.

Napoleon's French reforms were the models for Prussia. Baron von Stein and the Prussian premier Karl August Fürst von Hardenberg promoted the abolition of serfdom and also supported other reforms. Gerhard von Scharnhorst and August Neidhardt von Gneisenau were prominent among those who reformed the army.

Among the other Prussian reforms was their own Prussian reform of education on the French model; and the Prussian version of the model, not the French version of educational reform, became hugely influential. Prussian universities became models for universities throughout Germany and even in faraway countries such as Japan, Russia, and the USA.

Thereafter two European models existed for higher education. One, the Prussian model and later the German model, opened careers for talented boys. Most were not aristocrats. The boys were sometimes of very humble origin, and neither did they become clergymen for the most part. They prepared themselves for careers either in commerce or in the government bureaucracy. They studied in new academic departments including history and philosophy. This model of academic departments eventually directly influenced all academic disciplines including economics.

By contrast, Oxford and Cambridge changed only very slowly. They remained polite in the terms of our earlier discussion of Shaftesbury, Smith, and Bentham. By this I mean that the persuasiveness of academic arguments in Oxford and Cambridge depended less on intellectual merit than on the aristocratic style and grace with which the arguments were proposed. The students learned manly virtues. The Battle of Waterloo, said the duke of Wellington, was won on the playing fields of Eton College. As in sport so in intellectual matters, the English did not want to be professional. They delighted in being amateurs. In Oxford and Cambridge, students studied in colleges, not departments. The colleges were like social clubs, combining everyone into a social group, not an academic group. The recent Harry Potter stories may have made you familiar with the college model.

This politeness was based in Britain's very narrow legal definition of aristocracy. All over Europe, aristocrats had many privileges such as exemptions from the law. In England, these privileges and exemptions to their full extent were enjoyed only by those few who, at the calling of a parliament, received the sovereign's personal summons to the house of lords. In continental countries such as pre-revolutionary France as many people as one in twenty enjoyed aristocratic privileges and exemptions.

Therefore, a number of British people had money and status but were not noble in law. Many such persons would have been noble on the continent.

These were the people to whom politeness and sentiment were so important. Sentiment and politeness marked them out as ladies and gentlemen. The men often used the word “esquire” for it had a ring of nobility, and its usage was not subject to any legal limitation. The French had a saying, “*En Angleterre il y a beaucoup des messieurs qui s’appelle M. Esq.*” — in England many gentlemen call themselves Mr. Esquire. Oxford and Cambridge were aristocratic institutions in this sense. They had colleges, and they prepared students — all male of course — for lives as gentlemen.

While the polite model may seem attractive, remember that English people paid a high price for the aristocratic exclusivity of their two universities. The novelist Thomas Hardy (1840–1928) gave an example of this price in his novel *Jude the Obscure* (1895). Jude was a self-taught stone-mason. Perhaps you remember that Socrates, the teacher of Plato, was also a self-taught stone mason. Jude aspired to attend a famous college at Hardy’s fictional version of Oxford University, and Jude was rejected. Hardy described the imaginary scene thus:

The communication was brief, and not exactly what he had expected; though it really was from the master in person. It ran thus:

“Biblioll College.

“Sir, — I have read your letter with interest; and, judging from your description of yourself as a working-man, I venture to think that you will have a much better chance of success in life by remaining in your own sphere and sticking to your trade than by adopting any other course. That, therefore, is what I advise you to do. Yours faithfully, “T. Tetuphenay. “To Mr. J. Fawley, Stone-mason.”

This terribly sensible advice exasperated Jude. He had known all that before. He knew it was true. Yet it seemed a hard slap after ten years of labour, and its effect upon him just now was to make him rise recklessly from the table, and, instead of reading as usual, to go downstairs and into the street. He stood at a bar and tossed off two or three glasses, then unconsciously sauntered along till he came to a spot called The Fourways in the middle of the city, gazing abstractedly at the groups of people like one in a trance, till, coming to himself, he began talking to the policeman fixed there.

Jude would have had a better chance in France or Prussia. Napoleon famously said that he would open careers to talent. He said that every French soldier carried a marshal’s baton in his knapsack. Every soldier aspired to promotion and command, in other words. Napoleon revised French education so that very talented boys could earn advancement either in the army or the civil service.

LECTURE VIII. UTILITARIAN PHILOSOPHY AND ENGLISH EDUCATION

Following Jeremy Bentham’s lead, Henry Brougham, first baron Brougham (1778–1868) and others founded the University of London. Brougham intended the university to open itself to ordinary students, poor people. They could take exams and receive diplomas upon merit. He also undertook to print and supply books so that the poor could read them and pass the exams.

This was the German model at work in England. Matthew Arnold (1822–1888) was the best and greatest advocate of English educational reform on the German model. Arnold was less famous as a philosopher than Bentham, but Arnold was a better writer, and his books were readable. A school inspector and a noted poet, he wrote *Culture and Anarchy* (1869), a brilliant analysis of nineteenth-century British society and its cultural crisis. He said that industry and urbanization produced a new group of people who would eventually rule the country. We must educate our masters, he said. The aristocratic model in education would not do. It made students polite but idle, and it left them ignorant of science and technology. On the other hand, Protestant dissent from earlier times continued in the nineteenth century. Dissenting academies offered the main alternatives to English education on the polite model. Arnold said that this alternative was also defective, however. It was narrow-minded and barren. He recommended German academic life as the better alternative.

German universities established many of the now still-existing academic disciplines for the first time, for instance. Two of the most successful German academic disciplines were philosophy and history. Let us therefore briefly discuss academic history and philosophy as the Germans developed them in the early nineteenth century.

The German Leopold von Ranke (1795–1886) was one of the greatest historians of all time. He established history as an academic discipline, and he provided it with a method that lasted well into the twentieth century. Like so many others who lived through the French Revolution, he saw the state as the engine of change in human affairs. He thought possession of political power was the main or central thing in history, and he focused his attention on dip-

lomatic archives. He analyzed documents, making the careful study of them the basis of a professional academic discipline. His methods were similar to those of a detective or a judge.

The discipline of history provided a very clear example of the contrast between the English model of higher education and the German model. David Hume, Edward Gibbon (1737–1794), and Thomas Macaulay (1800–1859) were all very great historians, but they were not academic professionals. They were amateurs. They were gentlemen who dabbled in history. Ranke was academic and professional, not an amateur, not a dabbler.

Similarly G. W. F. Hegel (1770–1831) was one of the greatest philosophers. In the town of Jena during the battle there, he later went first to the University of Heidelberg and then to the University of Berlin. He was a key figure in the nineteenth-century triumph of that university. While in Jena, he did crucial work on his famous philosophy of mind or spirit, the foundation of so many future works both by Hegel himself and also by those he influenced. Taking the notion from the Greek philosopher Aristotle, Hegel spoke of dialectic as both a spiritual and also an historical process. An original condition or state of affairs alters under the impact of events into another condition or state of affairs, and then it alters again so that the end result was a synthesis or combination of the two successive conditions or states of affairs, said Hegel.

By now, you should see clear differences between Adam Smith and later classical economists. Smith was an academic, but he was an academic moral philosopher and not an academic economist. In its early-nineteenth-century stage, after Smith in other words, classical economics in Britain was half a professional and academic science, on a German model, and half an amateur and a casual activity carried on by gentlemen who had a strong sense of public duty and who were at best ambivalent about commerce.

We will continue to contrast the English and German models of economics in the next lecture.

LECTURE IX. DAVID RICARDO, THOMAS MALTHUS, KARL MARX, AND FRIEDRICH LIST

David Ricardo and Thomas Malthus became Britain's two most influential classical economists in the generation after Smith's death. Ricardo and Malthus continue to influence economists to this day. Like Jeremy Bentham, Malthus and Ricardo both combined the polite and the professional academic models. By contrast, the German model of professional scholarship shaped Karl Marx (1818–1893) and Friedrich List (1789–1846). Neither Marx nor List followed the polite model. List went to America. Marx moved to London, but he made no fortune there, nor did he enter parliament. Nevertheless, Marx and List each had more direct impact on European economic policies than did either Ricardo or Malthus.

Ricardo imitated an aristocratic style. You see the influence of Bentham on Ricardo in this regard. On the one hand, Ricardo wrote books that were without question those of an academic economist, but on the other hand he entered parliament and influenced public policy. Born a Jew and a foreigner, as he said on his tombstone, Ricardo made a million pounds by speculation just after the great British victory at Waterloo in 1815. He spread misinformation and profited from it, something that would now be illegal. Not then. He retired to live as a rich landowner in the country, a model English country gentleman, and he entered the house of commons. Ricardo was a quiet and polite parliamentarian who seldom spoke to the whole house but who instead worked and sought influence behind the scenes.

Unlike Ricardo, Karl Marx and Friedrich List did not imitate polite or aristocratic style. They were both German exiles, and they were examples of the German academic and professional style. Discouraged by the failure of the movement for political reform in Germany, Marx thought economic change would become the driver of political revolution. A man of the Rhineland and of the romantic reaction to classicism, Marx moved to London. There he took up Hegel's notion of the dialectic. Marx remade Hegel's dialectic on the model of Greek atomic theories. Hegel thought the dialectic

was a process of the spirit. Marx however transformed the dialectic: he made it material. When Marx took a doctorate in Greek atomic philosophy, he absorbed Greek theories that denied the existence of any spiritual reality. There existed nothing save atoms and the void, the theories held. Marx merged Hegel's dialectic with that materialism.

List presupposed government regulation of commerce especially foreign trade. In other words, he was a proponent of modified mercantilism. When he emigrated from Germany to Pennsylvania, he was influenced by the legacy of the American Revolution and by the policies of Alexander Hamilton (1755–1804), sometime secretary of the treasury. The great debate in America then was between those who supported tariffs and those who opposed them. List supported tariffs. He therefore of course contradicted Ricardo and other advocates of laissez-faire. Ricardo famously said that a nation should permit free penetration of its markets by foreign producers even when the result was a loss of its own domestic industry. For instance, Portugal should permit the free import of British woolen cloth even when that policy led to the loss of Portugal's own otherwise viable woolen manufacture. List opposed this reliance on free trade. Like previous advocates of mercantilism, he thought government should interfere with foreign trade when doing so was necessary to make the nation secure and prosperous. Thus he supported American tariffs because they were needed for American growth, and his followers also supported German tariff protection. These followers directly influenced German policies before and especially after Prince Otto von Bismarck (1815–1898) unified the German government in 1871. List's theories also influenced Russian and Japanese policies in the later nineteenth century. To this day, China, Japan, and South Korea follow policies that are essentially based on List's notions. Modern mercantilism, in other words. Neoliberal economists by contrast still condemn mercantilism, and they recommend Ricardo's strict laissez-faire policies for international trade.

While I do not assign anything by List for you to read, I do recommend *An Estimate of the Comparative Strength of Great Britain* by the Scottish antiquary George Chalmers (1742–1825). Maybe my background as a British historian makes the book more interesting to me than it would be to others, but I read it with attention. Anticipating List, Chalmers read Smith and liked his criticism of British restrictions on colonial trade, but Chalmers then proposed confining laissez-faire policies to trade between Britain and its own overseas dominions. Britain should not have restricted trade with its own colonies before the American Revolution, and it should not restrict trade with its remaining colonies now, but tariffs should still protect the British empire against for-

eign states, making Britain strong in war. "Imperial preference" people later called the policy.

Notice how Chalmers framed the tariff question by the traditional philosophic notion of liberty and its restraints. He argued for a natural liberty within one sphere, in this case for specific kinds of trade, imperial trade, and then he argued for civil restraints — tariffs — in a larger sphere that encompassed the smaller one. Nature would neither establish moral restraints nor enforce natural restraints there, and therefore the state must enforce civil restraints instead. The state should act in the name of its national defense and the common good, he said.

I ask you now whether Chalmers gave us a valid reading of Smith's *The Wealth of Nations*. A word to the wise. Bentham, Ricardo, Malthus, Marx, and List — none of them is worth reading in the original. Skip them all therefore and read Smith's *Wealth of Nations*. I have also suggested two standard commentaries on Smith, one by Emma Rothschild and the other by Athol Fitzgibbons. Please read *The Wealth of Nations* all the way through. I hope you have read *The Theory of Moral Sentiments* all the way through by now. If not, then please do so now, and then read *Wealth of Nations*. You can then read the two commentaries as you find them useful.

Read Smith first. As you read the two commentaries, you should compare them to our previous discussion of politeness. These two books are examples of the pinnacle of academic success. Note how smooth and polite both the books are. Not a word of controversy. Nothing partisan.

Both of the books of commentary are helpful, in my opinion, but again they are nothing like so important for you as your careful reading of Smith himself. Compare these commentaries to murder mysteries, if you like mysteries, by the way. We mentioned Agatha Christie. In one of the best, she followed the example of William Godwin who wrote the first real murder mystery, *Caleb Williams*. Godwin wrote the end of the book first, and then he wrote the rest of the book carefully hiding clues throughout. If you like murder mysteries, maybe you will think that these two academic commentaries are similar. You might therefore read their endings first and then thereafter trace the arguments as they build up along the way. Also pay close attention to the beginnings of the two books. Do not read Smith that way, however. His truly great books require an approach different from the one you should use for commentaries. Or murder mysteries. Or textbooks of course. That is why your reading this textbook is no substitute for your attending our class in person.

A final word about these commentaries. Read these two, but do not read other commentaries on Smith. Do not enter into the controversies about

him. Thomas Hobbes said that if he read as many books as other men, then he would be as ignorant as they. Read Smith himself. While you are at your light reading, however, and if you must have something more, try Friedrich Engels (1820–1895). He was a colleague and coauthor with Karl Marx, and Engels was the better writer of the two. He was easier to read than either Malthus or Ricardo. Try Engels, *The Condition of the Working-Class in England in 1844*. It was a great book in its own way. Full of fire. It would be a good introduction to our next lecture.

LECTURE X. INDICATIVE MATHEMATICS

Recent advances in the application of mathematics have transformed social analysis. In behavioral ecology, biology, brain chemistry, information technology, game theory, genetics, medicine, psychology, robotics, and other disciplines mathematics have shown their power, and its further application in all varieties of economics has a very bright future. However, Malthus and Ricardo both applied mathematics to social analysis with bad results. It is hard to know which of them did the greater injury. They both were wrong in philosophical terms. Wrong in their facts. Wrong in their use of mathematics. We will focus here on their mathematics.

Let us borrow the phrase, “indicative mathematics,” from the brilliant historian of mathematics Edna E. Kramer. We will use her phrase for words and numbers that have the appearance of mathematics but that do not answer the question, how many? When you see something that purports to be mathematics, you should always ask whether it answers the question, how many? We will reserve the word “mathematics” for words and numbers that answer that question. When words and numbers have the appearance of mathematics without answering that question — when they only appear to be mathematics but instead act merely as indications or signs — then we will call them “indicative mathematics.”

For instance, take a recent headline in *The Japan Times*, an excellent Tokyo English-language newspaper. “Japan + X = higher math scores” ran the headline. The body of the news article dealt with policy changes in regard to the teaching of mathematics in Japanese schools. The headline asked in a joking way what change in policy would result in improved skills for the students. The headline was not bad, but it was not mathematics in our strict sense because it did not answer the question, how many? It implied quantification when none existed. The X in the story concerned quality not quantity. No calculation had been done, and none was possible.

Another example would be the Soviet slogan that communism equaled Soviet power plus electrification. Again, this sentence had the appearance of being a mathematical calculation, but it did not answer the question, how many?

Let us say all this once again and in full for clarity's sake. You should distinguish between two types of mathematics.

1. The first type of mathematics answers the question, how many?
2. The second type of mathematics — indicative mathematics — does not answer the question, how many?

Instead, this type of mathematics does one of two things.

A. As in ancient Greek higher mathematics, this second type of mathematics reveals divine truth. One example would be the Golden Section. It underlay much Greek art and architecture. The Greek mathematicians divided a length into two sections so that the shorter section was to the longer section as the longer section was to the whole. Another example would be the Pythagorean belief that odd numbers were male and even numbers were female. Still another example would be number mysticism. For instance, take the notion of “a lucky number.” You could say that five is your lucky number, but you do not intend to answer the question, how many?

B. In modern academic debate, people often use mathematics to intimidate or to confuse. People will load an academic paper with mathematics, but their intention is to silence opponents, not to answer the question, how many?

Let us now turn to Thomas Malthus. I said earlier that students do not need to read anything either by Malthus or Marx. Perhaps you read Engels. In addition, I recommend reading two things about Malthus. These two additional items contain important pieces of information. Please read them both carefully.

One is the Wikipedia entry “Malthusian Growth Model.” Yes of course Wikipedia has its problems. Never mind them now. Just look at this one article and see the discussion of the following equation. Remember that a parameter is a constant in a set of variables.

$$P(t) = P_0 e^{rt}$$

where

- $P_0 = P(0)$ is the initial population size,
- r = the population growth rate, sometimes called Malthusian parameter,
- t = time.

When you read the entry, please note how brief is the body of the text for the entry but how extensive are its bibliography and its suggested external links. Notice how many subsequent economic models took their origins from

the work of Malthus. Notice also that the entry said the Malthusian population model was bound to be wrong in the long run, but it nevertheless had the chance of appearing to be correct in the short run, defined there as ten or twenty years.

Please also read *Parson Malthus* (1881), a little book, a mere pamphlet, by James Bonar. “Parson” is a somewhat denigrating word for “priest.” I said that I recommend you to read two things about Malthus. This little book is the second. You can download it for free from the Internet. The book is over one hundred years old and therefore long out of copyright.

Bonar said a good many things that you should learn and know about Malthus. Like so many young men, the young Malthus rejected his father's opinions, for one thing. Godwin and Condorcet influenced the senior Malthus, and he believed in the perfectibility of the human condition. A great change and improvement of human moral and ethical behavior would ameliorate human suffering, he hoped. The junior Malthus contradicted this happy notion. God built misery into the human condition because population would always outrun food supply, he said. Bonar further said that the junior Malthus was attuned to the currents and personalities of politics. In terms of our previous discussion of Shaftesbury, Malthus was polite. He knew how to make his way among the great and the good, and he was able to gain their wide acceptance for his theories on population. You should see his faulty population theories in this context.

Because of them, he became successful in his career.

Putting these two readings together, you have the beginnings of a correct analysis of Malthus.

On the one hand, Malthus put forth his faulty theory of population. The fault was in his connection of fertility to food supply. Fertility did not correlate with food supply. On the other hand, this connection of food to fertility, although faulty, found great favor with those in power, and Malthus basked in this favor. He rose to success in his career. In 1805 the East India Company College made Malthus its Professor of History and Political Economy. A clergyman, he might have become a humble parish priest, a parson. Instead, he became a kind of academic bishop.

Malthus used indicative mathematics, and he got his facts wrong about population. Malthus prospered while politicians put his theories to malign use. We will continue with those points in the next lecture.

LECTURE XI. THE CORN LAWS AND GREEK MATHEMATICS

We have learned to be cautious about bracketing Malthus and Ricardo with Smith as though all classical economists used the same methods. We will renew that caution again in this lecture. Malthus used ancient Greek higher mathematics, we will find, and Smith did not.

Note first, however, that Malthus used the same philosophical argument about liberty and restraint that we found in Smith. Malthus said that the sexual impulse was seldom subject to effective voluntary moral restraint. Therefore population grew until checked by its natural restraints, war, famine, and disease. These natural restraints were very effective but very harsh. What then could the state do? What were the effective civil restraints?

As for mathematics, Malthus differed from Smith. The latter clearly read seventeenth-century writers closely. He especially knew the British tradition of political arithmetic, and he followed the lead of those writers. They used very little higher mathematics, relying only on simple arithmetic, addition subtraction, multiplication, and division. I suggest that they did so in part because their purpose was to serve and persuade powerful men, ministers of state. Most of the ministers were also private proprietors of landed estates, and they were familiar with financial accounts in the context of landed estates. They could follow simple arithmetic, but that was all. Higher mathematics would not have persuaded them. Smith echoed this seventeenth-century approach. I teach another course on seventeenth-century political arithmetic, and I invite you to take that course also for a fuller understanding of the echo of seventeenth-century mathematics in Smith's work.

Malthus was a clergyman in the Church of England, and he followed Anglican precedent when he used mathematics for his population theories. He used ancient Greek mathematics, not the more recent and more advanced statistical methods that were available to him. So many great mathematicians appeared in Britain in the seventeenth century, most of them connected to Protestant dissent, but the Church of England triumphed in the eighteenth century, and it did not support mathematical education in its schools and

universities. Thomas Bayes (1701–1761) appeared as a first-rate British mathematician in the eighteenth century, but, significantly, he was a dissenting minister. Malthus did not benefit from recent advances in mathematics, therefore. He stuck to Greek mathematical methods and he sought to construct a ratio.

Ratios fascinated Greek mathematicians. Greek geometry was often concerned with ratios. They were relationships. They were proportions. The Golden Section was a ratio, for instance, a proportion. Renaissance art echoed the ancient fascination with ratios. An example was the drawing by Leonard da Vinci (1452–1519) of the proportions of the human body after Vitruvius. The latter was a Roman architect who lived from around 70 or 80 BC until after 15 BC. By the way, the classical buildings in the center of Saint Petersburg reflect the teachings about ratios from this school of architecture. For instance, Rossi Street has a length exactly ten times its width, and its height and width are identical. Some people think it is the most beautiful street in this very beautiful city.

We called it indicative mathematics when people used numbers not to count but instead to persuade people or to confuse or intimidate people. Malthus used numbers to persuade and even to intimidate people. Malthus did count things accurately, but he did not follow where counting led him. He got his argument first, and then he pushed his numbers around so they could body forth the argument and make it plausible. His numbers did not lead him to his conclusions. Instead, his conclusions drove his use of numbers.

Second, we saw that Malthus got his facts wrong too. Malthus said that the fertility rate was a dependant variable. The fertility rate by the way is a measure of the number of children that women will have during their lives. If the population of a community is to stay constant, then its women must have on average 2.1 children who survive to adulthood. (The phrase “birth rate” is not useful in this context and should be avoided. Stick to “fertility rate.”) Malthus said that food supply was an independent variable. Population increased when food supply increased, he said. The ratio that he constructed was not very different from the one in *The Japan Times*. Population minus food equals misery.

Here is why Malthus was wrong about fertility. Demographers refer to a demographic transition in the nineteenth century. Population increased in eighteenth-century and nineteenth-century Britain, but the increase resulted from a fall in mortality, not from a rise in fertility. In 1700, British population was stable with a small increase. Women had a very high fertility rate, but infant mortality was also very high, and few children lived to adulthood. Then

morality fell. We do not know why it fell. Even though the fertility rate fell, population rose because the mortality rate fell faster than the fertility rate. The fall in infant mortality was especially important, and more very young children lived than would have done so before. Eventually fertility fell in sympathy with the fall in mortality, but meanwhile the population rose. Food supply had nothing to do with any of it. With his indicative math and bad facts, Malthus cannot be a good guide to our own time. It is true that the world in the twenty-first century is overpopulated, but again the fall in mortality is the cause, and not a rise in fertility. Fertility rates are falling over most of the world.

Nevertheless, as Bonar said, it all worked for Malthus. He caught the mood of powerful people, and they believed his teachings. The same was true for Ricardo. It all worked for him, too.

Here is why it worked. The French Revolution changed the attitudes of British statesmen. Those in power continued to be as polite to one another as before, but when it came to the poor then statesmen gave up on the eighteenth-century aristocratic hope that reason was compatible with sentiment and that both would serve them as the twin foundations for reforms by which they could benefit all of society.

While young Malthus argued with his father on this point, he spoke for his new generation. They gave up on pity and benevolence. Excess population — and the consequent suffering of the poor — became mysteries ordained of God.

Mathematics illustrated the difference. It is wrong to think that Adam Smith used no mathematics and that others later added mathematics to make scientific economics. Instead, Smith followed seventeenth-century precedents in his use of mathematics.

Smith especially followed the British tradition of political arithmetic. This tradition went through several distinct phases. At first its practitioners distinguished between the decisions (policies) of statesmen on the one hand and the advice of thinkers and scholars on the other hand. The thinkers and scholars were servants and of lesser importance. Practitioners then called the decisions of statesmen (their policies) by the phrase “political arithmetic.” The phrase meant at that stage the policy itself, the actions of the state, not advice about policy. Deeds not words. Political arithmetic in other words was actual statecraft. The thing that then set “political arithmetic” apart from previous statecraft was that a the statesman who practiced it acted after being informed by thinkers about numbers. The statesman did not make war unless he knew how much money his government had on hand and how many men it had un-

der arms. Then later the phrase “political arithmetic” came to mean not the actual actions or policies of statesmen but instead comments or advice about policy. At first, advice to the statesmen who practiced political arithmetic was kept as a state secret. Those with access to statesmen were largely silent, and those who published their advice were usually those who lacked access to the highest levels of power. This changed. Eventually the phrase “political arithmetic” meant literature and not action. Finally, they abandoned the phrase in the late eighteenth century because it had become too confusing. In a general way therefore we can say that Smith was influenced by political arithmetic. That was the case with his use of mathematics.

When Smith occasionally used mathematics, he stuck to simple arithmetic, and he did so to make things clear. In this, Smith followed the examples of seventeenth-century writers such as Dr Charles Davenant (1656–1714) whom Smith often quoted. When Malthus used ancient Greek higher mathematics, he did so because it veiled his argument in divine mysteries. Pity would lead to disaster, and the ratio showed it. Victorian politicians understood this argument; Malthus persuaded them because they wanted to be persuaded. They gave Malthus his reward, too. He might have been stuck somewhere as a parish priest. Instead, he prospered.

We should separate the junior Malthus from Smith. It is an anachronism to project the later viewpoint of Malthus on the earlier *The Wealth of Nations*. That is part of what I meant when I said that classical economic writers were not all alike. To the end of his life, Smith had the same agenda as the senior Malthus and not the junior Malthus. It was, to use Smith’s words, a moral and a sentimental agenda, a benevolent agenda. That was why Smith turned back to *The Moral Sentiments* at the end of his life.

Therefore, although Malthus was wrong about population, he nevertheless achieved several important and long-lasting political results with his faulty theory. I will mention three.

First, the new poor law. Malthus and Ricardo influenced parliament’s decision to abandon the old poor law. At the very end of the time of the great Queen Elisabeth I (reigned 1558–1603), that is to say at the beginning of the seventeenth century, the parliament passed an act that none of her majesty’s subjects should starve. This act was afterward called the old poor law. It worked as follows. The Church of England already had the realm divided into dioceses and then further divided into parishes. Each parish had a vestry council which raised local taxes to maintain the church building there and to pay the parish clergyman. The old poor law used this existing framework. The act tasked the council in each parish to raise additional taxes to maintain poor

people who had been born in the parish. The poor could collect these benefits and yet continue to live in their own homes. Paying these benefits while allowing the poor to stay in their own homes was called “outdoor relief.”

Parliament made a new poor law in 1834. They made no new gesture of pity or benevolence. The new poor law abolished outdoor relief. The poor had to go into workhouses or poor houses in order to receive relief. The genders were separated in the workhouses. Families were broken up as a result.

Nineteenth-century radicals joked that Britain retained outdoor relief only for the gentry and aristocracy. The radicals meant that Britain was too small to provide high titles and important jobs for all those who fancied themselves entitled to such privileges. Empire provided such opportunities to them instead. To this day, London taxi drivers often call every visitor “governor” as though anyone who goes abroad can obtain such a title.

Second, free trade. By legislation in 1846, parliament removed the previous high tariffs on the import of grain. They called these tariffs “corn laws,” (English call “corn” the very same cereal that Americans call “wheat”). The old poor law lived and died together with these high tariffs on wheat. Eighteenth-century politicians had thought that their high tariffs raised the value of agricultural produce and thus secured the incomes of landowners. The high tariffs in turn enabled landowners to pay the high parish taxes that maintained the poor. The rich controlled parliament. They therefore enacted these taxes upon themselves and they maintained the poor out of a sense of duty. Note how the rich thereby conformed to the notions of right action set out clearly by various moralists. Were you reading the gospel? Charity and its fruits. Aristotle? The relief of the poor showed that rich landowners were magnificent. During the great mid-century war against France, just before Smith wrote *The Wealth of Nations*, the tariff system also supported the high national taxes needed for the war. Aristotle would have approved that patriotic courage and sacrifice. Shaftesbury? The good landowners paid their tax out of pity, and the greedy did so at the command of the state. In both cases, relief of the poor was benevolent. As I tried to show earlier, Smith in his discussion of greed in *The Moral Sentiments* echoed and reinforced some of these last ideas.

I say again that the French Revolution set the tone for repeal of this legislation. After the defeat of Napoleon, many British statesmen thought the danger of foreign war was past. Malthus and Ricardo caught the new mood. Malthus argued that outdoor relief contributed to excess population. Ricardo famously argued that free trade would bring overall benefits even if it destroyed specific industries or impoverished specific workers.

Thereby Ricardo and Malthus earned much public notoriety. “The dismal science,” people called their economic theories. It was a name to conjure with. As that phrase implied, many commentators were unfavorable, of course. Ordinary people hated the new poor law. The outcry against it echoed long in British history, and the success of socialism in twentieth-century Britain had its origin partly in the nineteenth-century popular outrage against the new poor law.

Perhaps the most famous contemporary complaint against Malthus and the new poor law was *A Christmas Carol* (1843) by Charles Dickens (1812–1870). Dickens himself had the same view of greed as Adam Smith, and that view of greed informed the whole novel. Scrooge learned from ghosts to put aside greed and to practice faith, hope, and charity instead. No doubt you know the novel already. Scrooge was the main character. His business partner died and then returned as a ghost to warn Scrooge, and other ghosts came thereafter. A fictional merchant in London, Scrooge was at first a grasping and greedy man, and he should remind you of our discussion of *The Theory of Moral Sentiments*. Remember its standard Christian condemnation of greed. *A Christmas Carol* was a very Christian novel. It was a narrative of redemption from sin, and it was about religious conversion. Greed is a sin, and Scrooge must mend his evil ways, said the ghosts. Dickens made an addition however. Scrooge paraphrased Malthusian population doctrine. Asked early on for a donation to relieve the poor, he said they had better die and reduce the surplus population. In a direct reference to the new poor law, he asked “are there no prisons, are there no workhouses?” Workhouses were where the poor had to go to get relief, and they referred to the workhouses as prisons.

Scrooge did not make an idle threat when he said the poor should die and reduce the surplus population. Many people died in Ireland during “the hungry forties” as they called that decade of the nineteenth century. Blight killed the Irish potato crop, and poor people there either died of famine or emigrated. Britain ruled Ireland at the time of course. The government in London did not offer timely direct aid, alas, although the Irish famine provided yet another motive for parliament to repeal the tariff on wheat. The British failure to relieve the Irish famine had important international consequences. The famine left a legacy of hatred. Because of the famine, many Irish people fled to America where they reinforced an already long-standing hatred of Britain in the US white population.

In another international consequence, the famine of the forties was an impulse for the London government to send their troops to war against Russia in the next decade. Very many soldiers of the British army then came from Ire-

land. Regarding them as a surplus population and employing them in a foreign war appealed to some Malthusian English minds. That this was a faulty policy was seen pretty clearly at the time. Lord Aberdeen (1784–1860) was prime minister during the Crimean War. He refused to restore a ruined church on his estate. He felt that he was not worthy to make such an offering. God would not find acceptable such an offering because it would be made by a sinful man who bore responsibility for war.

Aberdeen may have understood social analysis better than Ricardo did. Malthus on the other hand had a change of heart similar to that of Lord Aberdeen. At the end of his career, appalled by the consequences of public policies enacted partly in his name, Malthus separated himself from some of the conclusions of Ricardo.

A Christian clergyman, Malthus called at last for a clearer distinction between policy on trade and politics in general. He said that government should allow trade a natural liberty, but politicians should nevertheless enforce civil and moral restraints when those were necessary.

Government should aim policy at full employment for one thing. He thought also that society required a safety-net for the poor and the weak. In other words, government should allow a natural liberty for trade but it should do so only within boundaries. Civil restraints should be deployed by government when natural restraints were not effective to save lives. Even Thomas Hobbes would have agreed. Remember that George Chalmers attributed a very similar argument to Smith.

Malthus had a change of heart, but it was too late for many people. Much damage had already been done.

I said I would mention three examples. Here is the third, Karl Marx and the naturalist Charles Darwin (1809–1882). The phrase “social Darwinism” described the application of Darwin’s theory to human society. Darwin developed his theory while on a visit to the Galapagos Islands. He went around the world. Reading Malthus during the long voyage, Darwin realized then how population theory could account for the diversity of finch and other species that he saw on the Galapagos Islands. He then developed his theory of evolution by natural selection.

While Darwin applied this theory only to biology, others soon took it back to the study of human society for which Malthus had originally intended it. Darwinism eventually merged with Marxism. The resulting ideology shaped the lives of countless millions of people. For instance, take the young Joseph Jugashvili (1878–1953), the future Joseph Stalin. His mother wanted him to be a priest, and he went to a seminary in Georgia. He rebelled, however.

Reading Darwin, Stalin decided that Christianity was a fraud. “They are deceiving us,” he told his fellow students. Persuaded by Darwin, Stalin found his preferred form of social Darwinism in the theories of Marx.

Marx expected economics to become a predictive science, but, like Malthus and Ricardo, Marx used indicative mathematics. Marx was not an Anglican clergyman, and he made this same mistake as Malthus, but he lacked his predecessor’s excuse. Marx should have known better. In his own day, mathematics transformed his contemporary disciplines of social analysis because scholars used mathematical probability first to design experiments and then to evaluate their results. Lord Kelvin (1824–1907) said that when incapable of a mathematical expression human knowledge was then meager and unsatisfactory. He was right. In so far as any science of society is predictive, it is predictive on the basis of mathematics. Marxist science of society, with its Greek materialist philosophy but without later mathematical tools for social analysis, was bound to be meager and unsatisfactory.

In the long run, nineteenth-century population growth proved to be a benefit to the British economy. Production increased faster than population. Slow and incremental modifications in capitalism softened its early harsh and cruel nature. As Britain grew in wealth, it thereby escaped both the violent revolution predicted for it by Marx and also the population disaster predicted earlier by Malthus.

The old Russian joke was that Karl Marx was so boring to read that not even Stalin could read his books all the way through. According to another story, the censor approved Marx for publication in imperial Russia only because the books were so dull that they could do no harm. It should all have been true, and it should be true about Malthus, and Ricardo, too. They were all boring writers. I do not recommend any of them, therefore.

LECTURE XII. THE WEALTH OF NATIONS

Let us turn to Smith's most famous book now. To be precise, let us discuss two of its most important subjects, division of labor and capital. We turn to the very beginning of *The Wealth of Nations* — book I, chapter 1. Smith gave his readers an example of the division of labor. He selected the manufacturing of pins for his example, and he wrote as follows.

To take an example, therefore, from a very trifling manufacture; but one in which the division of labour has been very often taken notice of, the trade of the pin-maker; a workman not educated to this business (which the division of labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently accommodated with the necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size.

Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thou-

sand eight hundred pins in a day. But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is, certainly, not the two hundred and fortieth, perhaps not the four thousand eight hundredth part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations.

Since you read James Bonar on Malthus, therefore you remember that Bonar said that neither Malthus nor Adam Smith was an original writer. Both Malthus and Smith borrowed their main points from earlier writers, said Bonar. That was right about *Wealth of Nations*, of course.

Smith borrowed this pin machine example from *The Encyclopedia*, one of the most famous productions of the eighteenth-century French Enlightenment. It was new when Smith wrote, and most of Smith's students and his readers would immediately recognize it as his source. They would also hear in this passage a resonance which may not be there for English-speaking readers now. Smith's contemporaries would know — and we should remember — that France was a center of fashion. The pin example reminded readers then of the cloth trade and thence of high fashion. By implication, they would judge that France under its absolute monarch was as likely to thrive in the cloth trade as Britain.

As for capital and income, we have prepared ourselves for this discussion all along by our previous discussions of aristocratic style as a component of economic thought. Consider for a moment that “capital” and “income” (or “flow”) may be intellectual constructions. They may be subject to considerations of style. They may be rooted in the social conditions in which they arose.

To most of Smith's readers, familiar as they were with ancient literature, “capital” was a term from architecture. The word meant the head of a column. “Economics” was also a familiar Greek word that meant the management of a household. We should recognize that these ideas were creations, social constructions, and they were not objective realities. They followed fashion. Smith changed words and notions, and he guided later economists, but he was not like a discoverer guiding later sailors to a land which had been there before. People made it all up as they went along.

Smith in *The Wealth of Nations* argued that the division of labor was possible only as thrift allowed prior production to exceed current consumption. The thrifty person then accumulated a surplus, and he could use that surplus to rent or purchase the premises, machines, and materials that were necessary for the division of labor. In the third chapter of book II, Smith wrote as follows.

The principle which prompts to expense is the passion for present enjoyment; which, though sometimes violent and very difficult to be restrained, is in general only momentary and occasional. But the principle which prompts to save is the desire of bettering our condition, a desire which, though generally calm and dispassionate, comes with us from the womb, and never leaves us till we go into the grave.

We mentioned seventeenth-century political arithmetic. Smith's was in debt to political arithmetic both for his account of the division of labor and also for the notion of surplus. Sir William Petty (1623–1687) was one of the main writers of this school. Petty set forth early ideas of the division of labor and surplus, and Karl Marx credited Petty with this connection of surplus to the division of labor. Marx thought the connection was the crucial early contribution to the theory of capital. When you read Smith and Petty together, you see clearly what Marx meant because Smith's debt to Petty becomes clear. By the way, Malthus was also in debt to Petty. The notion that government should aim its policy at full employment was prominent in Petty's writings. The poor should not be allowed to starve, Petty said. Better they should instead be put to work digging holes in the ground and filling them up again.

An Olympian and original academic discussion was not the point of *The Wealth of Nations*. It argued that a large market rationalized production. A large market concentrated capital and divided labor. You would not buy a machine to make pins — you would not in other words concentrate capital — unless you were sure that you had a large market for your pins. You would not hire specialized workers, and they would not consent to be hired, unless you were sure of a large market. If you made one pin a day by hand, at least you did not have to amortize any large investment either of capital or of learned skill. You could stay with your other trades and make a living from them. Once the machine is purchased and the workers trained, the loss of a market would devastate many lives.

Smith took some key ideas from Josiah Tucker (1713–1799). Tucker was a clergyman of the Church of England, sometime dean of Gloucester Cathedral, and he advocated independence for British colonies in North America. He was also a theorist of population, a sympathetic correspondent with famous French ministers of state, and, what is important to us here, a forerunner of Adam Smith's theories that large markets would rationalize production. Tucker pioneered in particular the argument that Britain should abandon its control of colonial trade. Trade would increase if London were to free its colonies from control over their trade.

If you read Tucker after you read Smith, you will notice in contrast how smooth and secular was *The Theory of Moral Sentiments*. The difference be-

tween Smith and Tucker was in style or tone. Smith was sociable. He was a gentleman of polished and pleasing speech. At the end of Smith's life, he was rewarded by being made lord rector of the University of Glasgow. Tucker was a brilliant and original man, but no one made him the rector of a great university. He was too eccentric, and he irritated people. He mixed his religious arguments into his writings on trade, for one thing. He thought rebellious colonists in North America were modern-day roundheads or puritans whose principal purpose was the destruction of the Church of England. He so strongly advocated the welfare of the Church of England that someone unkindly remarked that Tucker made a religion of his trade and a trade of his religion.

Smith was a man of the Scottish enlightenment. I mentioned that Jeremy Bentham later coined the phrase, "Church of Englandism." Bentham hated a pompous, self-righteous contentment with things as they were. Here you have the thing itself, and Tucker was an early example of it. He was a brilliant writer on trade, but he was also a truculent Church of England man. He thought Britain would be well rid of its American colonies not only because trade would flow more freely but also because the American hostility to British rule was a conspiracy against the Church of England.

Comparing *The Wealth of Nations* with Petty and Tucker, you can therefore appreciate now at the end of our course that Smith made his most famous book from the merged influences of these prior writers. Petty contributed notions of surplus and division of labor, notions that were brilliant and original, and also Petty was not inclined to use many complex mathematical calculations. Smith borrowed all those points from Petty. Smith also borrowed from Tucker, but the influence of Tucker was sometimes adversarial. Tucker was hectoring, partisan, and sectarian. Smith was instead as smooth and secular as Shaftesbury. Furthermore, Smith was polite partly because of the contributing influence of Hutcheson and the sociability of the Scottish enlightenment. Reading *The Wealth of Nations*, you should also look in it for French influence even beyond the pin machine example. Emma Rothschild said that Smith read Condorcet closely, and Smith put many of that French philosopher's ideas into his own books. *The Wealth of Nations* persuaded ministers of state. The younger William Pitt told Smith that he and the other ministers of state were all Smith's students now. It was the return of a compliment. Smith was as polite as they in person. He was also polite in his writings. He was a utilitarian. His writings praised sentiment. Smith was as polite as the French merchants who long before had told their own minister of state, "It will be enough sir if you left us alone." Let it be, let it pass.

LECTURE XIII. CONCLUSION: TWENTY-FIRST-CENTURY NEOLIBERALISM

Clement Attlee (1883–1967), Britain's post-war socialist prime minister, said of Christianity that he had always accepted its ethical system but could not accept its mumbo-jumbo. I feel the same way about socialism. Malthus and Ricardo and their new poor law must outrage any decent person. Rich and powerful politicians seized upon this faulty but plausible social analysis in order to destroy the livelihood of the poor. Ricardo made his million, in other words, and Malthus enjoyed his secure professorship, while the rich and powerful used their faulty arguments to throw the poor into the street, to break up poor families, tearing wives from husbands and children from parents, and meanwhile some other poor people in Ireland starved while their sons were sent off to die in wicked foreign wars. Terrible. Engels was right to condemn it.

What was wrong with socialism however was the pretense of its being a science. Engels was right to be filled with fiery indignation about the condition of poor people in England in 1844. He based much of his book, however, on parliamentary inquiries, and these resulted in legislation. Slowly, peaceful change softened British capitalism. British society as a result remained hierarchical but became cohesive. It became so stable and secure that it withstood the shock of two world wars.

Marx was therefore wrong with his pompous science of materialism and dialectic. It was socialist mumbo-jumbo. The irony of course was that Marxism was mumbo-jumbo precisely from the same intellectual faults that beset the theories of Malthus and Ricardo, and furthermore Marxism did much more harm to the human race than did Scrooge-like capitalism, the new poor law and Irish famine and Crimean War, and all.

I ask you now at the end of our course whether any human society must restrain greed in order to secure its own safety and welfare. Aristotle thought so, making generosity similar to physical courage. Generosity was a voluntary moral restraint, and it was based in shame. It was a disgrace not to be generous. It was a disgrace to be a coward. Aristotle therefore put a moral restraint

on greed just as he put a moral restraint on cowardice. Alternatively, Aristotle thought the state must sometimes make rich people share their wealth with the poor. It could do so then through tax, for instance. That would not be a moral restraint. It would be a compulsory civil restraint.

I ask you also whether or not Smith answered this question as follows. Did he at the end of his life still think that pity and benevolence were natural or innate moral sentiments in some persons, and did he think that these sentiments would provide some of the moral restraints necessary for civil society? Pity if so could then restrain greed. He also said again in *The Wealth of Nations* that greed could find its own additional involuntary natural restraint in an invisible hand. Did Smith however also believe that the state must nevertheless establish additional civil restraints because moral restraints such as pity and natural restraints such as the invisible hand were not always sufficient to maintain civil society? Government could allow an unabridged natural liberty in trade, in other words, only so long as greed also found its own natural restraints in that sphere, but at the same time the state would have to be ready to intervene. It must do so when its intervention was needed to maintain civil restraints in other and larger spheres of society. A natural liberty in trade is a good thing only so long as the state also maintains its own security and also protects the lives and property of its inhabitants. Is that a correct reading of *The Wealth of Nations*?

Bonar said that Smith's arguments in *The Wealth of Nations* were not original. However, Bonar should have added thereafter that *The Theory of Moral Sentiments* was more original than *The Wealth of Nations*. The earlier book stood out against its background of previous eighteenth-century assumptions. Fifty years ago, Albert O. Hirschman made these assumptions clear. Many eighteenth-century people thought that trade (and self-interest) would soften human nature and ameliorate both human passions and also the conditions of human society. Smith used utilitarian philosophy to describe a mechanism by which this might occur. When *The Theory of Moral Sentiments* was translated into French, they gave it a new title, the metaphysics of the soul. That new French title was not far off the mark.

Malthus accepted the framework of Smith's argument about liberty and its restraints, but he rejected Smith's enlightenment conclusions. Malthus thought in terms of liberty and its restraints in other words, but he also thought that only harsh natural restraints (famine, disease, war) would work in the case of population, and he made little mention of pity or benevolence. Excess population would swamp civil society, he argued. He used Greek mathematics to buttress this argument along with claims about the will of God.

Neoliberal economists now often lack Smith's concern with moral philosophy. Many people think therefore that much twenty-first-century economic analysis is now as faulty as was the nineteenth-century analysis of Marx or Malthus. Take for instance the economist Garrett Hardin's trenchant criticism of capitalism in his essay on the tragedy of the commons. He said that our global community as a whole can suffer great harm if private persons follow rational economic paths that profit them as individuals. You can read his 1968 essay on the Internet, and you can follow later versions of his argument on the Internet.¹ Ask yourself whether Garrett Hardin proves to you the importance of your previous readings in this course. Notice how he discussed a puzzle about greed and its restraint for which you have been prepared by studying Smith, Malthus, and Ricardo.

The End.

¹ <http://www.econlib.org/library/Enc/TragedyoftheCommons.html>

BIBLIOGRAPHY

*Asterisk denotes materials available as free downloads from the Internet.

*Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation* 1789.

*James Bonar, *Parson Malthus* 1881.

Bruyere, Jean de la, *Characters*, tr. H. an Laun, New York: Brentano, 1929.

*George Chalmers, *An Estimate of the Comparative Strength of Great Britain* 1794.

David Daiches, Peter Jones, and Jean Jones, editors, *The Scottish Enlightenment 1730–1790: A Hotbed of Genius*. Edinburgh: Saltire Society, 1996.

Lorraine Daston, *Classical Probability in the Enlightenment*. Princeton: Princeton University Press, 1995.

Charles Davenant, *The Political and Commercial Works*, 4 vols. Farnborough, UK: Gregg, 1967.

John Dwyer and Richard B Sher, Eds., *Sociability and Society in Eighteenth-century Scotland*. Edinburgh: Mercat Press, 1993.

*Friedrich Engels, *The Condition of the Working-Class in England in 1844*.

Athol Fitzgibbons *Adam Smith's System of Liberty, Wealth, and Virtue The Moral and Political Foundations of The Wealth of Nations* Oxford: Oxford University Press, 1995.

*William Godwin, *Political Justice* 1791.

*Garrett Hardin, "The Tragedy of the Commons" 1968.

Albert O Hirschman, *The Passions and the Interests: Political Arguments for Capitalism before its Triumph*. Princeton: Princeton University Press, 1977.

Lawrence E. Klein, *Shaftesbury and the Culture of Politeness: Moral Discourse and Cultural Politics in Early Eighteenth-Century England*. Cambridge: Cambridge University Press, 1994.

Edna E. Kramer, *The Nature and Growth of Modern Mathematics*. Princeton: Princeton University Press, 1982.

Arthur O. Lovejoy, *The Great Chain of Being*. Cambridge, MA: Harvard University Press, 1936.

*Naomi Oreskes and Erik Conway, merchantsofdoubt.org

Sir William Petty, *Economic Writings*. New York: Kelley, 1986.

*David Ricardo, *Letters to Thomas Robert Malthus 1810–1823*, by James Bonar, 2011.

Emma Rothschild, *Economic Sentiments: Adam Smith, marquis de Condorcet, and the Scottish Enlightenment*. Cambridge, MA: Harvard University Press, 2003.

Steven Shapin, *A Social History of Truth: Civility and Society in Seventeenth-century England* Chicago: University of Chicago Press, 1995.

*Adam Smith, *The Nature and Cause of the Wealth of Nations* 1776.

*Adam Smith, *Theory of Moral Sentiments* 1759.

Charles E. Stangeland, *Pre-Malthusian Doctrines of Population: A Study in the History of Economic Theory*. New York: Kelley, 1966.

Here are some possible topics for student papers.

al-Ghazali, Jeremy Bentham, capital, Columbian exchange, marquis de Condorcet, the Corn Laws, division of labor, Friedrich Engels, Benjamin Franklin, Thomas Hobbes, David Hume, laissez-faire, mercantilism, Friedrich List, John Locke, Thomas Robert Malthus, Bernard Mandeville, marginal utility, J S Mill, Thomas More, occasionalism, Sir William Petty, the third earl of Shaftesbury, Theophrastus, Josiah Tucker, utilitarian philosophy, Utopia.

INDEX

A

Aberdeen, Lord 52
 al-Ghazali 24
 American Revolution 32
 Ancient moral theory 11
An Estimate of the Comparative Strength of Great Britain 40
 Aristotle 11, 15, 58
 Arnold, Matthew 37
 Austerlitz, Battle of 34

B

Bayes, Thomas 47
 Beauty 13, 23
 Belloc, Hilaire 11
 Beneficence 27, 50
 Benevolence 29, 48, 59
 Bentham, Jeremy 30, 31, 32, 33, 37, 57
 Bentham, Sir Samuel 30
 Berkeley, George, bishop 24
 von Bismarck, Prince Otto 40
 Blackstone, Sir William 31
 Bonar, James 45, 55, 59
 British society 58
 Brougham, Henry, baron 37
 Burr, Aaron 32

C

Caleb Williams 41
 Cambridge 35
 Capital 55
 Catherine II, empress 30
 Chalmers, George 40, 52
 Character 20, 23

Characteristics 20
 China 40
 Christian morality 10, 11
 Christie, Agatha 41
Christmas Carol 51
 Church of England 32, 49, 57
 Civil restraint 41, 46
 Civil War, English 28, 31
 Common law, English 31
Condition of the Working-Class in England in 1844 42
 Condorcet, marquis de 8, 29, 45, 57
 Copernicus 25
 Corn laws 50
 Crimean War 52, 58
Culture and Anarchy 37
 Customary law 31

D

Darwin, Charles 52
 Daston, Lorraine 8
 da Vinci, Leonardo 47
 Dickens, Charles 51
 Division of labor 56

E

East India Company 45
Ecce Homo (Titian) 21
 Economic crisis, 2008 15
 Edwards, Jonathan 17, 24, 32
 Elisabeth I 49
Encyclopedie 52, 55
 Engels, Friedrich 42, 58
 Epistemology 22, 23

F

Fable of the Bees 12
 Fertility rate 47
 Fitzgibbons, Athol 7, 29, 41
 Free trade 52
 Free will 23
 French Revolution 31, 48
 Full employment 52, 56

G

Galen 20
 Generosity 11, 12, 18, 58
 German intellectual style 30
 German University model 30, 34, 35, 37
 Germany 34
 Gibbon, Edward 38
 von Gneisenau, August Neidhardt 35
 Godwin, William 41, 45
 Golden Section 44, 47
 Greed 10, 11, 12, 13, 14, 18, 51, 58

H

Hamilton, Alexander 40
 Hardin, Garrett 60
 Hardy Thomas 36
 Hegel, G.W.F. 38, 39
 Hermitage Museum, State 21
 Hirschman, Albert O. 59
 Hobbes, Thomas 12, 17, 28, 42, 52
 Holy Roman Empire 34
 Hume, David 7, 23, 24, 38
 Humors, doctrine of 20, 22, 25
 Hutcheson, Francis 27, 28, 32

I

Idea 23
 Indicative mathematics 43, 53
 Inequality 14, 15
 Innate knowledge 13
Inquiry into the Nature and Cause of the Wealth of Nations 7
 Invisible hand 10, 13, 18, 24, 59
 Ireland 51, 58

J

Japan 40
Japan Times 43
 Jena 38
 Johnson, Samuel Doctor 15
Jude the Obscure 36

K

Kames, Lord 24
 Karl August Fürst von Hardenberg 35
 Kelvin, Lord 53
 Klein, Lawrence E. 28
 Kneller, Sir Godfrey 22
 Kramer, Edna E. 43

L

Laissez-faire 7, 8, 29, 40
Leviathan 12
 Liberty 17, 41, 59
 List, Friedrich 39, 40
 Locke, John 22, 25, 28

M

Macaulay, Thomas 38
 Malebranche, Nicolas 24
 Malthusian Growth Model 44
 Malthus, Thomas 8, 39, 43, 45, 46, 47, 49, 52, 58, 60
 Mandeville, Bernard 12
 Mansfield, Lord 31
 Marx, Karl 39, 42, 52, 53, 56
 Mathematics 8, 24, 32, 43, 46, 47, 53
 Medicine 20
 Mercantilism 40
 Metaphysics 22
 Mill, John Stuart 25
 Moral philosophy 9, 13, 16, 17, 18, 24, 27, 29
 Moral restraints 25, 41, 58
Moral Sentiments 23, 49

N

Napoleon 34, 36
 Natural liberty 52, 59
 Natural philosophy 24
 Natural restraint 46, 59
 Neoliberal economists 40
 Neoliberalism 7, 8, 58, 60
 New Light 27
 New poor law 49, 51, 58

O

Occasionalism 24
 Old poor law 49
On Liberty 25
 Outdoor relief 50
 Oxford 35, 36

P

Parson Malthus 45
 Pascal, Blaise 25
 Petronius, Gaius 15
 Petty, Sir William 56
 Philosophical radicals 31
 Pitt, William 57
 Pity 23, 26, 28, 32, 49, 59
 Plato 11, 13, 22
 Politeness 28, 35, 41, 57
 Polite society 16
 Political arithmetic 48, 56
 Poor houses, workhouses 50, 51
 Potemkin, Prince Grigory 30
 Prison reform 32
 Probability 53
 Prussia 34
 Prussian universities 35
 Pythagoras 44

R

von Ranke, Leopold 37
 Ratio, proportion 47
 Reformation 32
Republic 22
 Restraint 17, 26, 52, 59
 Ricardo, David 8, 31, 39, 40, 43, 58, 60
 Rothschild, Emma 7, 29, 41, 57

S

Satyricon 15
 von Scharnhorst, Gerhard 35
 Scotland 27
 Scottish Enlightenment 57

Selfishness 12
 Sense data 13, 32
 Sense experience 24
 Sentiment 36
 Sentiments 59
 Shaftesbury, third earl of 20, 22, 23, 25, 28
 Shapin, Steven 8
 Smith, Adam 7, 12, 13, 16, 17, 24, 29, 32, 38, 49, 60
 Sociability 27, 29, 57
 Social contract 17
 Socialism 58
 South Korea 40
 Spenser, Edmund 22
 Stalin, Joseph 52
 Statecraft 48
 Stoicism 22, 29
 Syllogism 13

T

Tariff 40, 41
 Tax 14
 Theophrastus 20, 22
The Theory of Moral Sentiments 7, 9, 10, 18, 27, 28, 51, 59
 Thomas Aquinas, St. 17
 Tolstoy, Leo 34
Tragedy of the Commons 60
 Tucker, Josiah 56

U

University of Glasgow 57
 University of London 30, 32
 Utilitarianism 9, 19, 20, 26, 27, 28, 30, 32, 37, 59
 Utility 19, 23, 25

V

Vitruvius 47

W

War and Peace 34
 Waterloo 39
The Wealth of Nations 9, 41, 54, 55, 56, 57, 59

John A. Taylor is a docent at Saint Petersburg State University in Russia. He was a Fulbright Lecturer in Japan and Russia. The University of Chicago granted his PhD.

Books by John A Taylor

1. *Адам Смит и Неолиберальная Экономика*. Saint Petersburg. Saint Petersburg State University Press, 2016.
2. *How the Internet Exposed the Private Lives of the Royal Family*. Lewiston, N.Y: Edwin Mellen Press, 2011.
3. *British Empiricism and Early Political Economy: Gregory King's 1696 Estimates of National Wealth and Population*. Westport, Conn.: Praeger Press, 2005.
4. *Diana, Self Interest, and British National Identity*. Westport, Conn.: Praeger Press, 2000.
5. William Covel, *A Just and Temperate Defense of the Five Books of Ecclesiastical Polity*. First published 1603, republished with an introduction by John A. Taylor. Lewiston, N.Y: Edwin Mellen Press, 1998.
6. *Popular Literature and the Construction of British National Identity 1707 1850*. San Francisco: International Scholars Publications, 1997.
7. *British Monarchy, English Church Establishment, and Civil Liberty*. Westport, Conn.: Greenwood Press, 1996.

John A. Taylor, 1942—

ADAM SMITH: RELEVANCE FOR THE 21ST CENTURY

Учебное издание

Руководитель проекта
Художественный редактор
Верстка
Корректор

*Кувакина
В. Зассеева
Т. Петрова
В. Макосий*

Подписано в печать 11.04.18
Формат 60 × 88/16. Бумага офсетная
Гарнитура «Ньютон». Печать офсетная.
Усл. п. л. 4,4 Тираж 100. ООО «ИТК Троицкий мост»
E-mail: info@trmost.com Internet: www.trmost.com
Отпечатано с готовых диапозитивов в ООО «Лесник-Принт»
199026, Санкт-Петербург, ул. Сабировская, д. 37.